

# STEELEX™

**MODEL ST1000  
14" BANDSAW**



**OWNER'S  
MANUAL**

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**WARNING: NO PORTION OF THIS MANUAL MAY BE REPRODUCED IN ANY SHAPE OR FORM WITHOUT  
THE WRITTEN APPROVAL OF WOODSTOCK INTERNATIONAL, INC.**

**#8302TR**

**Printed in Taiwan**



## **WARNING!**

**This manual provides critical safety instructions on the proper setup, operation, maintenance and service of this machine/equipment.**

**Failure to read, understand and follow the instructions given in this manual may result in serious personal injury, including amputation, electrocution or death.**

**The owner of this machine/equipment is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, blade/cutter integrity, and the usage of personal protective equipment.**

**The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.**



## **WARNING!**

**Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:**

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

**Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.**

**Woodstock International, Inc. is committed to customer satisfaction. Our intent with this manual is to include the basic information for safety, setup, operation, maintenance, and service of this product.**

**We stand behind our machines! In the event that questions arise about your machine, please contact Woodstock International Technical Support at (360) 734-3482 or send e-mail to: [tech-support@shopfox.biz](mailto:tech-support@shopfox.biz). Our knowledgeable staff will help you troubleshoot problems and process warranty claims.**

**If you have comments about this manual, please contact us at:**

**Woodstock International, Inc.  
Attn: Technical Documentation Manager  
P.O. Box 2309  
Bellingham, WA 98227**

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# MODEL ST1000 SPECIFICATIONS

## Product Dimensions:

Weight ..... 154 lbs.  
 Length/Width/Height ..... 27" x 26" x 67<sup>1</sup>/<sub>4</sub>"  
 Footprint (Length/Width) ..... 24" x 22"

## Shipping Dimensions:

Type ..... Cardboard  
 Content ..... Machine  
 Weight ..... 165 lbs.  
 Length/Width/Height ..... 45"L x 20"W x 15"H

## Motor:

Type ..... TEFC Capacitor Start Induction  
 Horsepower ..... <sup>3</sup>/<sub>4</sub> HP  
 Voltage ..... 110/220V  
 Prewired ..... 110V  
 Phase ..... Single  
 Amps ..... 9/4.5A  
 Speed ..... 1725 RPM  
 Cycle ..... 60 Hz  
 Number Of Speeds ..... 1  
 Power Transfer ..... V-Belt Drive  
 Bearings ..... Shielded and Lubricated

## Main Specifications:

### Operation

Blade Speed ..... 3000 FPM  
 Table Tilt ..... Left 15°, Right 45°

### Cutting Capacities

Maximum Cutting Height ..... 6<sup>1</sup>/<sub>4</sub>"  
 Throat Capacity Left of Blade ..... 13<sup>1</sup>/<sub>2</sub>"

### Blade Information

Standard Blade Length ..... 93<sup>1</sup>/<sub>2</sub>"  
 Blade Width Range ..... <sup>1</sup>/<sub>8</sub>" - <sup>3</sup>/<sub>4</sub>"  
 Blade Guide Type ..... High Density Plastic  
 Rear Support Guide Type ..... Ball Bearing Roller

### Table Information

Table Size ..... 14"W x 14"L x 1<sup>1</sup>/<sub>2</sub>"T  
 Floor-to-Table Height ..... 43<sup>7</sup>/<sub>8</sub>"

### Construction

Table ..... Precision Ground Cast Iron  
 Fence ..... Aluminum  
 Base ..... Pre-Formed Steel  
 Body ..... Precision Ground Cast Iron  
 Wheels ..... Computer Balanced Aluminum  
 Blade Guides ..... Plastic Guide Blocks with Ball Bearing Rear Support  
 Paint ..... Powder Coated

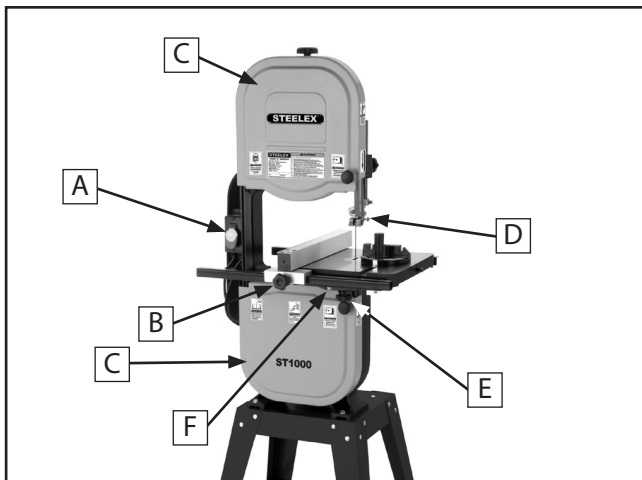
### Other Information

Wheel Diameter ..... 13<sup>3</sup>/<sub>4</sub>"  
 Dust Port Size ..... 4"  
 Country of Origin ..... Taiwan

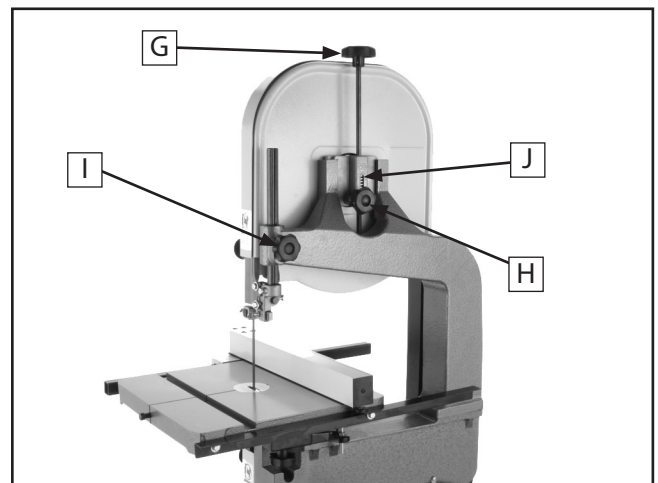
# MACHINE FEATURES

The instructions in this manual will be easier to understand if you become familiar with the location and names of the basic features of your new machine. Match up the feature list below with the letters in **Figures 1 & 2** to identify the external bandsaw feature locations.

- A. Locking ON/OFF Switch:** Makes the machine run or stop, and with the removable key, prevents others from using the bandsaw. However, it does not cut power to the machine and should never be substituted for unplugging the power when required.
- B. Fence Lock Knob:** Locks the fence in place for cutting operations and unlocks the fence for adjustments or removal.
- C. Hinged Wheel Covers:** Allow easy access to wheels and pulleys for maintenance, blade changes or adjustments.
- D. Blade Guide Assemblies:** Two assemblies, one upper and one lower, each consisting of guide blocks for side-to-side support and a roller bearing to support the back of the blade.
- E. Table Trunnion Adjustment Knobs:** Loosens the table on the trunnions for tilt adjustments and locks the table in place at a desired angle.
- F. Table Tilt Scale:** Displays the current angle of table tilt.
- G. Blade Tension Adjustment Knob:** Controls blade tension adjustments.
- H. Blade Tracking Adjustment Knob:** Controls how the blade will track on the wheels by adjusting the tilt of the upper wheel.
- I. Guide Post Lock Knob:** Unlocks the guide post for adjustments and locks the guide post in place after adjustments.
- J. Blade Tension Scale:** Displays the current blade tension and is marked with a scale for a range of blade sizes.



**Figure 1.** Front view of bandsaw.



**Figure 2.** Rear view of bandsaw.

# SAFETY

## WARNING

### Zero Risk Does Not Exist

As with any human activity, zero risk from using machinery does not exist and cannot be attained.

Operating this machine, as well as any machine, can be dangerous or relatively safe depending on the condition of the machine and the operator's experience, common sense, working conditions, and use of personal protective equipment (e.g., safety glasses, respirators, etc).

Understanding this manual reduces the risks from using this machine. Because not every possible hazard can be identified, common sense and risk awareness must be used at all times.

To protect yourself, assess the hazards of each activity you perform and find the best way to perform those activities or use protective devices to decrease your risk of an accidental injury.

Below are common hazard symbols in this manual that alert associated levels of risk:



Death or catastrophic harm **WILL** occur from failure to heed.



Moderate injury or fire **MAY** occur from failure to heed.



Death or catastrophic harm **COULD** occur from failure to heed.



Machine damage may occur from failure to heed.

## WARNING

### Safety Instructions

- OWNER'S MANUAL.** This type of machine presents serious injury hazards to untrained users. Read through the entire manual before starting the machine.
- GUARDS.** Operating this machine with any of the guards removed greatly increases the risk of serious accidents. Only operate this machine with the guards in place, undamaged, and correctly working.
- EYE PROTECTION.** Operating this machine may result in an eye injury. Minimize this risk by wearing safety glasses. Everyday eyeglasses only have impact resistant lenses, they are NOT safety glasses.
- RESPIRATORY PROTECTION.** Wood dust created by this machine may cause severe respiratory illnesses. Minimize your risk from this hazard by wearing a NIOSH approved respirator while operating this machine.
- HEARING PROTECTION.** Operating this machine for extended periods of time may cause hearing loss. Wear hearing protection to minimize this risk.
- ENTANGLEMENT AVOIDANCE.** Loose clothing, gloves, neckties, jewelry or long hair may get caught in moving parts. Remove or otherwise secure these items when operating this machine to reduce your risk.

# WARNING

## Safety Instructions

- 7. MENTAL ALERTNESS.** Operating this machine when not fully alert greatly increases the risk of accidental injury. Never operate when under the influence of drugs/alcohol, when tired, or otherwise distracted.
- 8. TRAINED/SUPERVISED OPERATORS ONLY.** Only allow trained and properly supervised personnel to operate machinery. Make sure safe operation instructions are clearly understood. Keep all children and visitors a safe distance from the work area. Use padlocks and master switches, and remove start switch keys to prevent accidental starting.
- 9. UNATTENDED MACHINE.** Machines left unattended while running present multiple hazards, including visitor danger, fire, and self-inflicted damage. Always turn your machine **OFF** before leaving it.
- 10. OPERATING ENVIRONMENT.** Operating this machine in a wet location may result in electrocution; operating near flammable gasses may result in a fire or explosion. Only operate this machine in a dry location that is free of flammable gasses.
- 11. CLEAN WORK AREA AND GOOD LIGHTING.** Clutter and dark shadows increase the risk of an accident. Only operate this machine in a clean, well-lit work area.
- 12. ELECTRICAL CONNECTION.** Improperly connecting the machine to the power source may result in electrocution or fire. Always adhere to local electrical codes.
- 13. DISCONNECT POWER.** Adjusting machine when it is connected to the power source greatly increases the risk of injury from accidental startup. Always disconnect power **BEFORE** doing any work on machine, including changing blades or other tooling.
- 14. BLADE CONDITION.** Dull or damaged blades require more effort to use, are difficult to control, and increase the risk of injury. Sharpen or replace blades when they become dull or damaged.
- 15. HAND PLACEMENT.** Placing hands or fingers in the blade path greatly increases the probability of serious injury. Always keep hands or fingers out of the blade path when cutting.
- 16. CUTTING PROPER MATERIAL.** This machine is not designed to cut metal or any material except wood. Attempting to cut other materials may exceed the limits of the machine and increase the risk of personal injury.
- 17. DO NOT FORCE THE MACHINE.** To minimize your risk of personal injury, work at the speed for which the machine or accessory was designed. Always feed stock evenly and smoothly. **DO NOT** force or twist blade while cutting, especially when sawing small radii.
- 18. SECURE WORKPIECE.** Use clamps or a jig to hold the workpiece when practical. A secured workpiece protects your hands and allows you to focus on cutting safely.
- 19. BLADE REPLACEMENT SAFETY.** Besides disconnecting power when replacing blades, make sure teeth face down toward the table. The force of the cut is always down. Also, make sure the blade is properly tensioned after installing so it will not fly off the wheels.
- 20. MOBILE BASES.** If your machine is placed on a mobile base, always make sure the mobile base is locked in position before operating the machine.
- 21. DIFFICULT OPERATIONS.** If you are experiencing difficulties performing the intended operation, stop! Contact our Technical Support or ask a qualified expert how the operation should be performed.



# POWER REQUIREMENTS

## Operation

### ! WARNING

Serious personal injury could occur if you connect the machine to the power source before you have completed the set up process. **DO NOT** connect the machine to the power source until instructed to do so.

### Amperage Draw

The Model ST1000 motor draws the following amps under maximum load:

Motor at 110V ..... 9 Amps  
Motor at 220V ..... 4.5 Amps

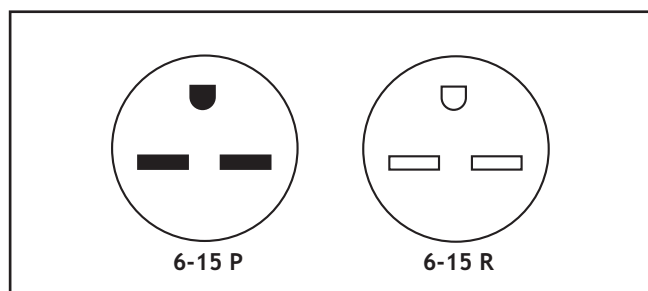
### Circuit Recommendations

We recommend using a dedicated circuit for this machine. You **MUST** connect your machine to a grounded circuit that is rated for the amperage given below. Never replace a circuit breaker on an existing circuit with one of higher amperage without consulting a qualified electrician to ensure compliance with wiring codes. **If you are unsure about the wiring codes in your area or you plan to connect your machine to a shared circuit, consult a qualified electrician.**

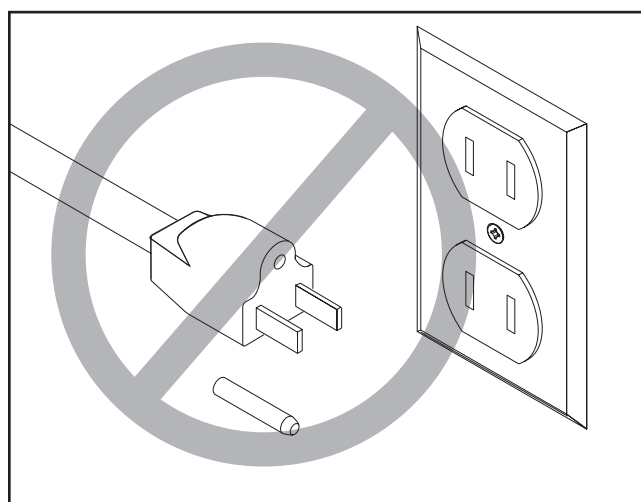
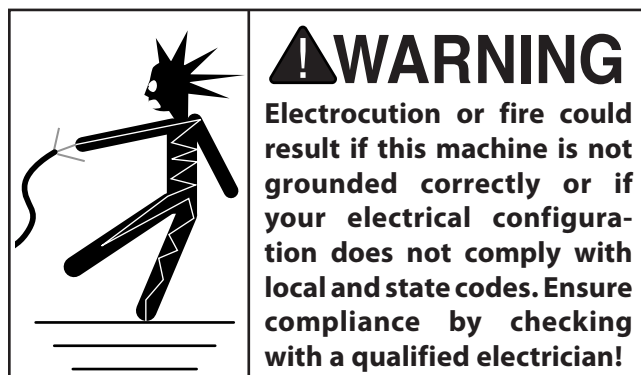
110V Circuit ..... 15 Amps  
220V Circuit ..... 15 Amps

### Plug/Receptacle Type

Included 110V Plug Type ..... NEMA 5-15  
Recommended 220V Plug Type ..... NEMA 6-15



**Figure 3.** Typical type 6-15 plug and receptacle.



### ! CAUTION

**This machine must have a ground prong in the plug to help ensure that it is grounded. DO NOT remove ground prong from plug to fit into a two-pronged outlet! If the plug will not fit the outlet, have the proper outlet installed by a qualified electrician.**

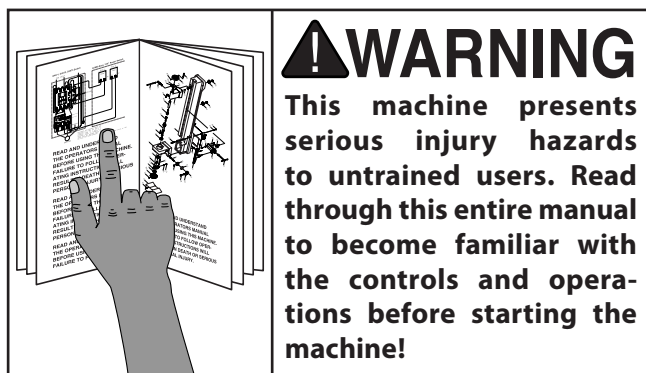
### Extension Cords

We do not recommend the use of extension cords, but if you find it absolutely necessary:

- Use at least a 16 gauge cord that does not exceed 50 feet in length!
- The extension cord must also contain a ground wire and plug pin.
- A qualified electrician **MUST** size cords over 50 feet long to prevent motor damage.



# SETUP



## Unpacking

The Model ST1000 was carefully packed when it left our warehouse. If you discover the machine is damaged after you have signed for delivery, *please immediately call Customer Service at (360) 734-3482 for advice.*

Save the containers and all packing materials for possible inspection by the carrier or its agent. *Otherwise, filing a freight claim can be difficult.*

When you are completely satisfied with the condition of your shipment, you should inventory the contents.

## Items Needed for Setup

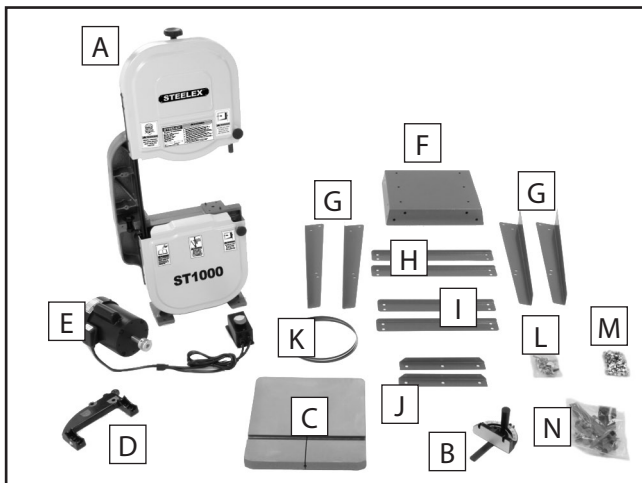
The following items are needed to complete the setup process, but are not included with your machine:

DESCRIPTION	Qty
• Safety Glasses (for each person) .....	1
• Dust Collection System .....	1
• 4" Dust Hose (length as needed) .....	1
• 4" Hose Clamps.....	2
• Wrenches or Sockets 13mm .....	2
• Wrench 10mm .....	1
• Hex Wrench 6mm .....	1
• Hex Wrench 5mm .....	1
• Phillips Screwdriver.....	1
• Machinist's Square .....	1
• Ruler.....	1
• Straightedge.....	1
• Leather Gloves (pair).....	1
• Feeler Gauge 0.016" .....	1

# Inventory

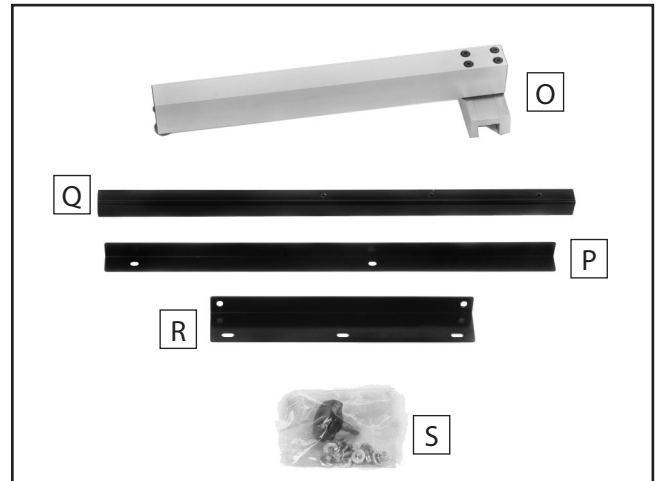
After all the parts have been removed from the two boxes, you should have the following items:

Main Inventory (Figure 4)		Qty
A.	Body Assembly .....	1
B.	Miter Gauge .....	1
C.	Table .....	1
D.	Trunnion Support Bracket .....	1
E.	Motor with Pulley & Switch .....	1
F.	Base Plate .....	1
G.	Legs .....	4
H.	Front/Rear Leg Braces .....	2
I.	Side Leg Braces .....	2
J.	Body Support Braces .....	2
K.	Saw Blade .....	1
L.	Hardware Bag .....	1
M.	Hardware Bag .....	1
N.	Hardware Bag .....	1



**Figure 4.** Inventory contents.

Fence Inventory (Figure 5)		Qty
O.	Fence Body .....	1
P.	Rear Angled Rail .....	1
Q.	Front Square Rail .....	1
R.	Front Rail .....	1
S.	Hardware Bag .....	1



**Figure 5.** Fence inventory.


Hardware		Qty
•	Carriage Bolts M8-1.25 x 16 (Stand) .....	34
•	Flange Nuts M8-1.25 (Stand) .....	34
•	Hex Bolts M8-1.25 x 35 (Body/Stand) .....	4
•	Flat Washers 8mm (Body/Stand) .....	4
•	Lock Washers 8mm (Body/Stand) .....	4
•	Hex Nuts M8-1.25 (Body/Stand) .....	1
•	Cap Screws M8-1.25 x 25 (Motor) .....	2
•	Fender Washers 8mm (Motor) .....	2
•	Lock Washers 8mm (Motor) .....	2
•	Plastic Cord Clamp (Motor Cord) .....	1
•	Metal Cord Clamp (Switch Cord) .....	1
•	Phillips Head Screw M5-.8 x 6 (Switch Cord) ....	1
•	Star Washer 5mm (Switch Cord) .....	1
•	Phillips Head Screws M5-.8 x 15 (Switch) .....	2
•	External Tooth Lock Washers 5mm (Switch) .....	2
•	Phillips Head Screws M5-.8 x 12 (Cords) .....	2
•	Hex Bolts M6-1 x 20 (Lower Blade Guides) .....	2
•	Flat Washers 6mm (Lower Blade Guides) .....	2
•	Hex Bolt M6-1 x 16 (Upper Blade Guide) .....	1
•	Hex Bolts M6-1 x 10 (Blade Guard) .....	2
•	Fender Washers 6mm (Blade Guard) .....	2
•	Hex Bolts M8-1.25 x 30 (Table) .....	2
•	Lock Washers 8mm (Table) .....	2
•	Knobs M10-1.5 (Table) .....	2
•	Hex Bolts M8-1.25 x 80 (Positive Stop) .....	1
•	Hex Nuts M8-1.25 (Positive Stop) .....	1
•	Hex Bolts M6-1 x 10 (Fence Rails) .....	4
•	Hex Bolts M6-1 x 20 (Fence Rails) .....	4
•	Lock Washers 6mm (Fence Rails) .....	8
•	Flat Washers 6mm (Fence Rails) .....	8
•	Knob M10-1.5 x 25 (Fence) .....	1
•	Upper Guide Assembly .....	1
•	Lower Guide Assembly .....	1
•	Blade Guard .....	1
•	Lower Guard .....	1

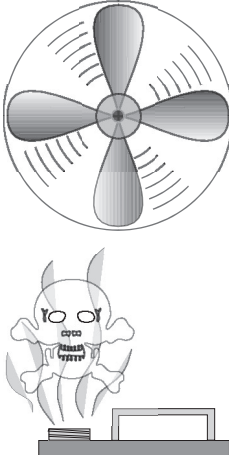
# Cleanup

The unpainted surfaces are coated with a waxy oil to protect them from corrosion during shipment. Remove this protective coating with a solvent cleaner or citrus-based degreaser.

To clean thoroughly, some parts may need to be removed. **For optimum performance from your machine, make sure you clean all moving parts or sliding contact surfaces that are coated.**

Avoid chlorine-based solvents as they may damage painted surfaces should they come in contact. Always follow the manufacturer's instructions when using any type of cleaning product.

	<p><b>! WARNING</b></p> <p>Gasoline and petroleum products have low flash points and could cause an explosion or fire if used to clean machinery. <b>DO NOT</b> use gasoline or petroleum products to clean the machinery.</p>
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	<p><b>! CAUTION</b></p> <p>Many of the solvents commonly used to clean machinery can be toxic when inhaled or ingested. Lack of ventilation while using these solvents could cause serious personal health risks or fire. Take precautions from this hazard by only using cleaning solvents in a well ventilated area.</p>
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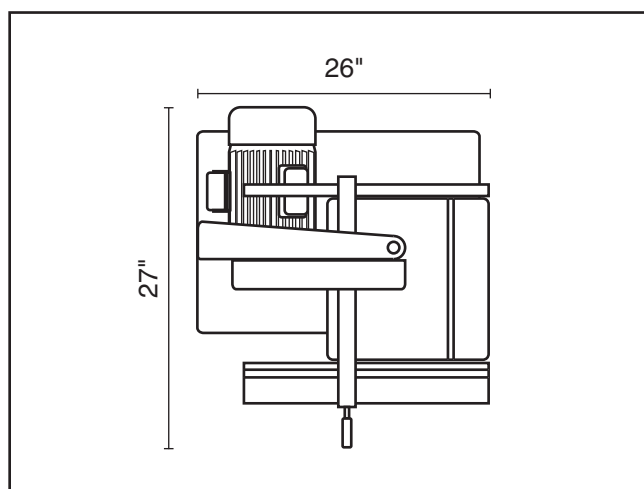
# Site Considerations

## Floor Load

The Model ST1000 weighs 154 lbs. and has a base footprint of 24" W x 22" D.

## Necessary Space

Consider existing and anticipated needs, size of material to be processed through each machine, and space for auxiliary stands, work tables, or other machinery when establishing a location for your saw. See **Figure 6** for the minimum working clearances of the Model ST1000.



**Figure 6.** Working clearances.

	<p><b>! CAUTION</b></p> <p>Unsupervised children and visitors inside your shop could cause serious personal injury to themselves. Lock all entrances to the shop when you are away and <b>DO NOT</b> allow unsupervised children or visitors in your shop at any time!</p>
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# Assembling Stand

Components and Hardware Needed:	Qty
Carriage Bolts M8-1.25 x 16.....	34
Hex Nuts M8-1.25.....	34
Base Plate .....	1
Legs .....	4
Side Leg Braces .....	2
Front/Rear Leg Braces.....	2
Support Braces.....	2

## To assemble the stand:

1. Place the base plate upside down on a flat surface, and loosely attach the legs to the base plate with the carriage bolts and hex nuts.

**Note:** Install the carriage bolts with the round end facing out.


2. Loosely attach the front/rear leg braces and side braces to the legs, then turn the stand right side up. Make sure it sits level, then tighten all the hex nuts.
3. Place the support braces on the underside of the base plate, making sure the hole patterns match and are properly aligned.
4. Insert a carriage bolt through two end holes in each brace and loosely secure them as shown in **Figure 7**.



**Figure 7.** Carriage bolts in rear holes.

# Main Body

Components and Hardware Needed:	Qty
Body Assembly.....	1
Hex Bolts M8-1.25 x 35.....	4
Hex Nuts M8-1.25.....	4
Flat Washers 8mm.....	4
Lock Washers 8mm.....	4



**! WARNING**

The Model ST1000 is a heavy machine (154 lbs.). **DO NOT over-exert yourself while unpacking or moving your machine—get assistance.**

## To install the main body:

1. With the help of an assistant, set the body onto the stand and align the stand holes with the main body.
2. Have your assistant hold the main body in place and secure the main body to the stand (**Figure 8**) with the hex bolts, flat washers, lock washers, and hex nuts.



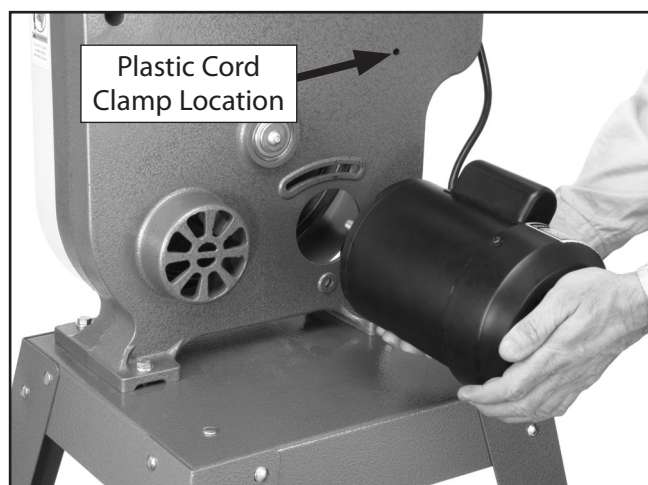
**Figure 8.** Securing main body to the stand.

# Motor & Switch

Components and Hardware Needed:	Qty
Motor .....	1
Switch .....	1
Cap Screws M8-1.25 x 25 .....	2
Flat Washers 8mm .....	2
Lock Washers 8mm .....	2
Phillips Head Screws M5-.8 x 12 .....	2
Phillips Head Screws M5-.8 x 15 .....	2
External Tooth Lock Washers 5mm .....	2
Phillips Head Screw M5-.8 x 6 .....	1
Star Washer 5mm .....	1
Metal Cord Clamp .....	1
Plastic Cord Clamp .....	1

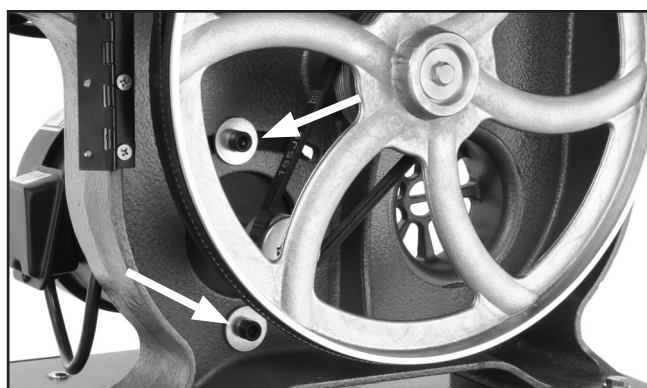
## To install the motor and switch:

1. Place the motor into the motor mounting area on the bottom of the main body (**Figure 9**).



**Figure 9.** Placing motor on the body.

2. Loosely thread the cap screws, flat washers and lock washers into the motor (**Figure 10**).



**Figure 10.** Installed cap screws.

3. Place the V-belt on the pulley, move the motor to the left with moderate pressure, and tighten the cap screws.
4. Push the belt with moderate pressure. If the belt deflects more than  $\frac{3}{4}$ ", repeat **Step 3**.
5. Ground the switch with the M5-.8 x 6 Phillips head screw and 5mm star washer, then attach the switch to the body with the M5-.8 x 15 Phillips head screws and 5mm external tooth lock washer (**Figure 11**).



**Figure 11.** Attaching the switch.

6. Secure the cords on the front of the bandsaw body with the metal cord clamp and an M5-.8 x 12 Phillips head screw.
7. Secure the cord on the rear of the bandsaw body with the plastic cord clamp and an M5-.8 x 12 Phillips head screw (**Figure 9**).

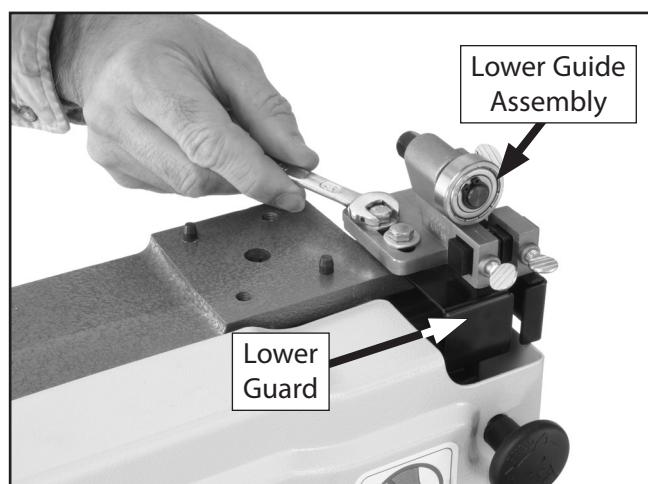


# Installing Blade Guides

Components and Hardware Needed:		Qty
Upper Guide Assembly .....		1
Lower Guide Assembly .....		1
Blade Guard .....		1
Lower Guard .....		1
Hex Bolts M6-1 x 20 .....		2
Hex Bolts M6-1 x 10 .....		2
Hex Bolt M6-1 x 16 .....		1
Fender Washers 6mm .....		2
Flat Washers 6mm .....		2

## To install the lower blade guide:

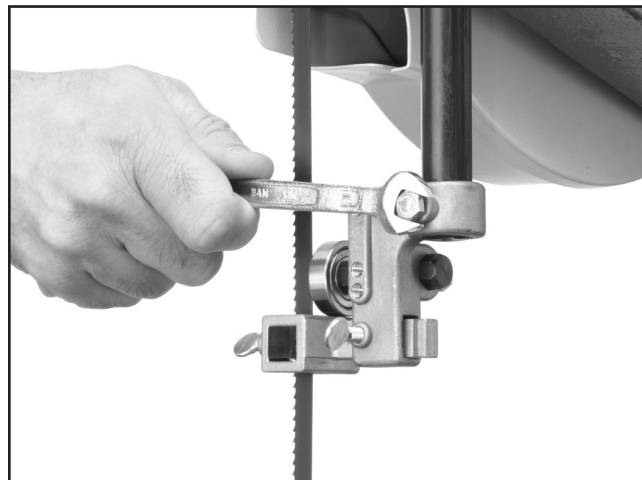
1. Align and place the lower guard onto the body.
2. Align and place the lower guide assembly onto the lower guard, and insert the M6-1 x 20 hex bolts and 6mm flat washers (**Figure 12**).



**Figure 12.** Installing lower blade guide assembly.

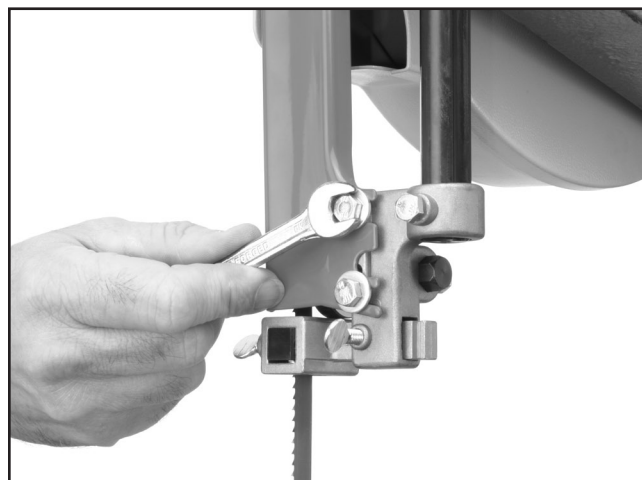
## To install the upper blade guide assembly:

1. Slide the upper guide assembly onto the guide post until the bottom of the guide post is flush with the bottom of the blade guide post housing (**Figure 13**) and secure with an M6-1 x 16 hex bolt.



**Figure 13.** Installing upper blade guide.

2. Attach the blade guard to the upper guide assembly with the M6-1 x 10 hex bolts and 6mm fender washers, as shown in **Figure 14**.



**Figure 14.** Installing upper blade guard.

## **!WARNING**

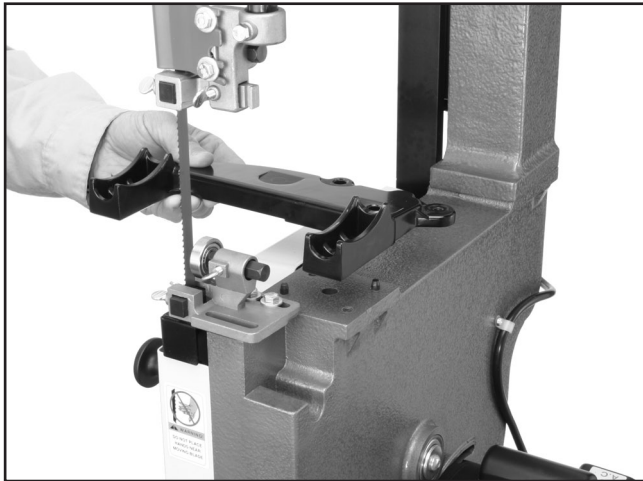
The blade guard **MUST** be installed during operation. Failure to follow this warning may result in serious personal injury!

# Table

Components and Hardware Needed:	Qty
Trunnion Support Bracket.....	1
Table.....	1
Hex Bolts M8-1.25 x 30.....	2
Lock Washers 8mm.....	2
Knobs M10-1.5 .....	2

## To install the table:

1. Align the trunnion support bracket with the pins and bolt holes in the body (**Figure 15**).



**Figure 15.** Aligning trunnion support bracket with the pins and bolt holes.

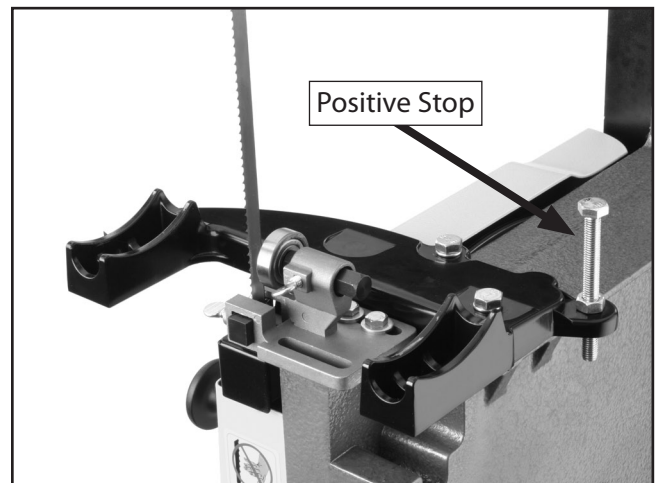
2. Secure the trunnion support bracket with the hex bolts and lock washers.
3. Remove the table pin and table insert.
4. With the blade in the table slot, move the table over the base, rotate the table, and place the table bolts through the trunnions.
5. Thread the knobs onto the table bolts to secure the table.
6. Re-install the table pin and table insert.

# Installing Positive Stop

Components and Hardware Needed:	Qty
Hex Bolt M8-1.25 x 80.....	1
Hex Nut M8-1.25.....	1

## To install the positive stop:

1. Thread the M8-1.25 hex nut halfway onto the M8-1.25 x 80 hex bolt (this is the positive stop bolt).
2. Thread the positive stop bolt into the threaded hole on the trunnion support bracket as shown in **Figure 16**.



**Figure 16.** Installed positive stop bolt.



# Installing Fence

Components and Hardware Needed:	Qty
Fence Body .....	1
Front Angled Rail .....	1
Front Square Rail .....	1
Rear Rail .....	1
Hex Bolts M6-1 x 10 .....	4
Hex Bolts M6-1 x 20 .....	4
Lock Washers 6mm .....	7
Flat Washers 6mm .....	7
Knob M10-1.5 x 25 .....	1

## To install the fence:

1. Secure the rear rail against the rear of the table with the flat un-drilled surface facing up, and install two M6-1 x 20 hex bolts flat washers and lock washers.
2. Attach the front angled rail to the front of the table with M6-1 x 20 hex bolts, flat washers, and lock washers.
3. Attach the square rail to the front angled rail with the M6-1 x 10 hex bolts, lock washers and flat washers (**Figure 17**).



**Figure 17.** Installing front rail system.

4. Set the fence on the fence rail to the left of the blade.
5. Secure the fence with the M10-1.5 x 25 knob (**Figure 18**).



**Figure 18.** Correctly installed fence.

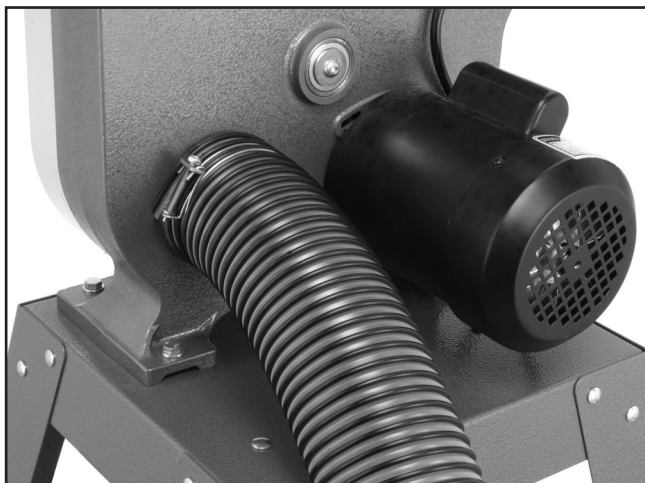
## Dust Collection

### CAUTION

**DO NOT** operate the Model ST1000 without an adequate dust collection system. This saw creates substantial amounts of wood dust while operating. Failure to use a dust collection system can result in short and long-term respiratory illness.

#### To connect a dust collection hose:

1. Place the hose clamp over the end of the 4" flexible hose.
2. Fit the 4" flexible hose over the dust port, as shown in **Figure 19**, and tighten.



**Figure 19.** Dust hose attached to dust port.

3. Tug the hose to make sure it does not come off.

**Note:** A tight fit is necessary for best performance!

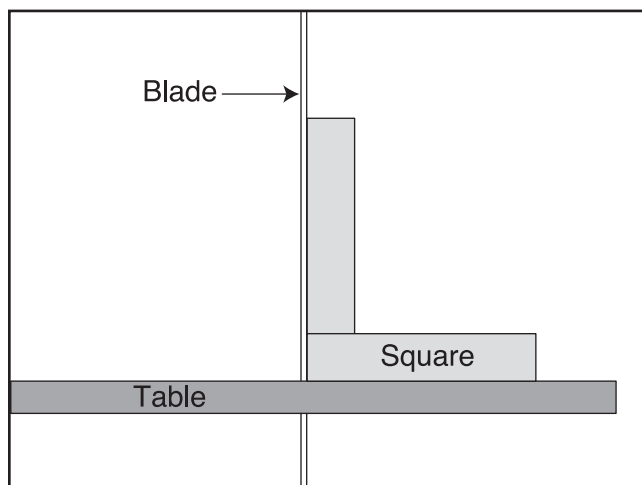
4. Connect hose to a dust collection system.

## Adjusting Positive Stop

The positive stop allows the table to be reset 90° to the blade after tilting to the right.

#### To set the positive stop:

1. Ensure the blade is correctly tensioned as described in **Tensioning Blade** instructions on **Page 17**.
2. UNPLUG THE BANDSAW!
3. Loosen the jam nut that locks the positive stop adjust bolt in place.
4. Raise the guide post and place a machinist's square on the table next to the side of the blade as illustrated in **Figure 20**. Tilt the table until it rests 90° to the blade, then secure it with the table tilt knobs.



**Figure 20.** Squaring table to blade.

5. Adjust the positive stop bolt to the adjusted height of the table and tighten the jam nut.
6. Rest the table on the positive stop bolt and check for accuracy.

**Note:** See **Calibrating Table Tilt Scale** on **Page 20**.

# Blade Tracking

The blade tracking is primarily affected by the tilt of the upper wheel, also known as **Center Tracking**; and the alignment of both wheels, also known as **Coplanar Tracking**. (For Coplanar Tracking, see the **Wheel Alignment** instructions on **Page 37**.)

The wheels on the Model ST1000 were aligned at the factory, so **Center Tracking** is the only adjustment that needs to be performed when the saw is new.

*For the best performance from your saw, regularly maintain the proper tracking of the blade.*

## To center track the blade:

1. UNPLUG THE BANDSAW!
2. Adjust the upper and lower guide bearings and support bearings away from the blade.
3. Open the upper wheel cover.
4. Adjust blade tension until the mark on the blade tension scale matches the size of the installed blade.

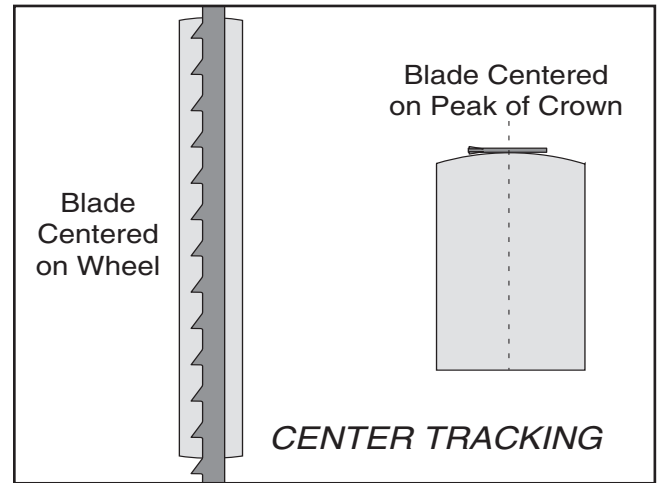
## CAUTION

The aluminum spokes may have sharp edges and the blade teeth may extend beyond the edge of the wheel, creating a laceration hazard. Be careful when turning the wheels by hand.

5. Spin the upper wheel by hand at least three times and watch how the blade rides on the crown of the wheel. Refer to **Figure 21** for an illustration of this concept.

—If the blade rides in the center of the upper wheel and is centered on the peak of the wheel crown, then the bandsaw is already tracked properly and no further adjustments are needed at this time.

—If the blade does not ride in the center of the upper wheel and is not centered on the peak of the wheel crown, then continue with the following steps.



**Figure 21.** Center tracking profiles.

6. Loosen the lock nut on the tracking control knob threads so that the tracking control knob will rotate for adjustments.
7. Spin the upper wheel with one hand and rotate the tracking control knob with the other hand to make the blade ride in the center of the bandsaw wheel tire.

**Note:** Turn the bandsaw **ON** to confirm the blade is tracking properly.

8. Tighten the tracking control lock nut and close the upper wheel cover.

## NOTICE

Changes in the blade tension may change the blade tracking.

## Test Run

Once the assembly is complete and you have read through **Safety** section, test run the machine before continuing with the setup.

If, during the test run, you cannot easily locate the source of an unusual noise or vibration, stop using the machine immediately, then contact our Technical Support for further assistance.



### To test run the machine:

1. Make sure that you have performed the **Blade Tracking** instructions.
2. Make sure that the blade guides are moved away from the blade and that the blade is not touching the table or table insert.
3. Plug the machine into the power source.
4. Turn the bandsaw **ON** to allow it to reach full speed, then turn the bandsaw **OFF**.

—The bandsaw should run smoothly with little or no vibration or rubbing noises. Disconnect power to troubleshoot any problems before continuing.

5. Remove the switch safety key.
6. Try to turn the bandsaw **ON** with the key removed.

—If the bandsaw starts with the key removed, disconnect power immediately and call Technical Support.

—If the bandsaw does not start with the key removed then it is operating properly.

## Tensioning Blade

A properly tensioned blade is essential for making accurate cuts and is a prerequisite before making many bandsaw adjustments.

### To tension the bandsaw blade:

1. Make sure you have performed the **Test Run** instructions on this page and that the blade is tracking properly.
2. Raise the upper blade guide assembly as high as it will go, and adjust the upper and lower guide blocks as far away from the blade as possible.

**Note:** This procedure will not work if the guide blocks have any contact with the blade.

3. Adjust the blade tension knob until it matches the blade size on the bandsaw.

**Note:** This scale can only be considered as a general guide, follow these steps to accurately set the blade tension.

4. Turn the bandsaw **ON**.
5. Release the tension one quarter of a turn at a time. Do this very slowly. When you see the bandsaw blade start to flutter, stop decreasing the tension.
6. Now, slowly increase the tension until the blade stops fluttering, then tighten the tension another quarter turn.
7. Look at what the tension gauge reads and use that as a guide for tensioning that blade in the future.

**Note:** Always detension the blade after use to increase blade life and reduce strain on the bandsaw components.

## NOTICE

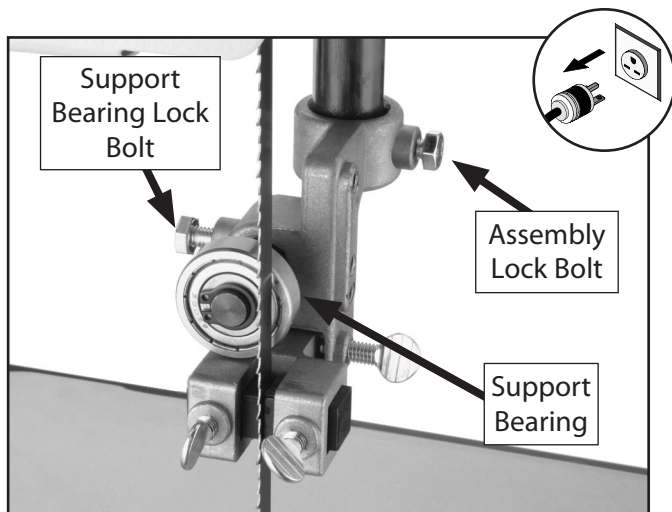
**After blade tension and tracking are set correctly, properly adjust the upper and lower support bearings and guide-block assemblies into position before cutting operations.**

# Adjusting Support Bearings

The support bearings are positioned behind the blade and support the back of the blade during cutting operations. Proper adjustment of the support bearings is an important part of making accurate cuts and also keeps the blade teeth from coming in contact with the guide blocks while cutting.

## To adjust the support bearings:

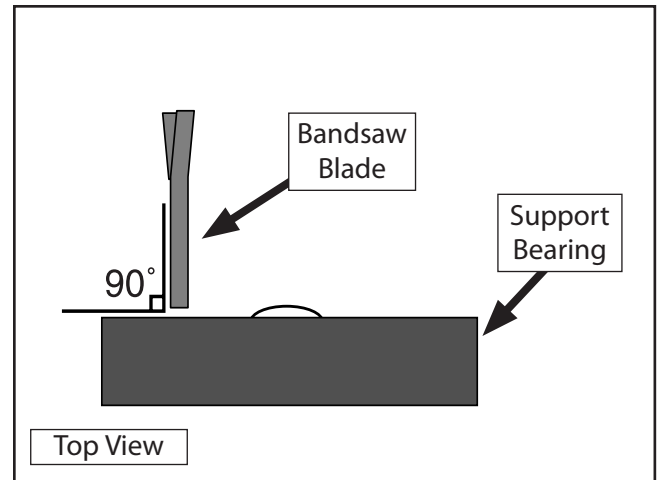
1. Make sure that the blade is tracking properly and that it is correctly tensioned.
2. UNPLUG THE BANDSAW!
3. Familiarize yourself with the support bearing controls shown in **Figure 22**.



**Figure 22.** Support bearing controls.

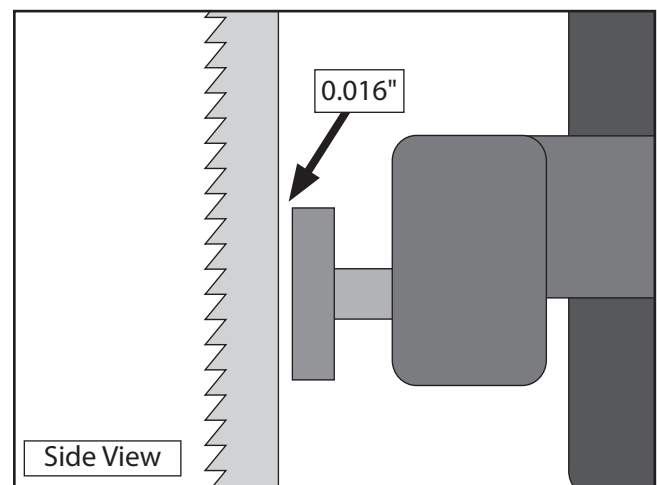
4. Loosen the assembly lock bolt.

5. Look at the face of the support bearing and rotate the blade guide assembly side-to-side, until the blade is perpendicular with the face of the support bearing as illustrated in **Figure 23**.



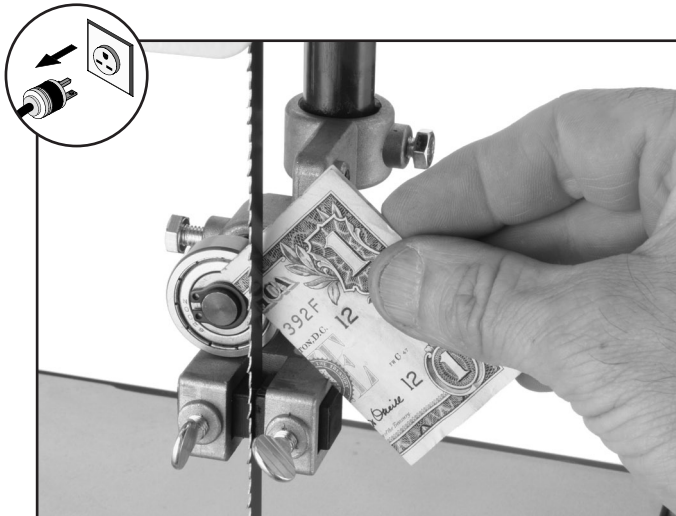
**Figure 23.** Blade should be perpendicular (90°) to the face of the support bearing.

6. Tighten the assembly lock bolt.
7. Loosen the support bearing lock bolt on the support bearing adjustment shaft.
8. Using the feeler gauge, slide the support bearing approximately 0.016" away from the back of the blade as illustrated in **Figure 24**.



**Figure 24.** Blade should be aligned approximately 0.016" away from the bearing edge.

**Note:** For a quick gauge, fold a dollar bill in half twice (four thicknesses of a dollar bill is approximately 0.016") and place it between the support bearing and the blade as shown in **Figure 25**.



**Figure 25.** Dollar bill folded twice to make a quick 0.016" gauge.

9. Tighten the support bearing lock bolt to keep the support bearing locked in place.

## NOTICE

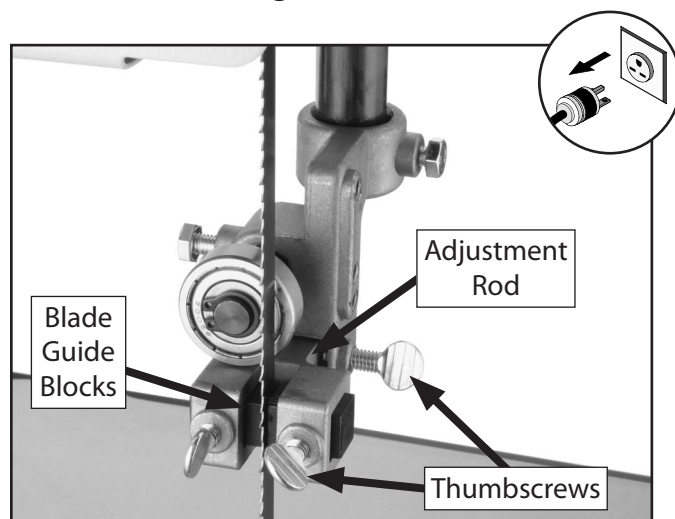
Whenever changing a blade or adjusting tension and tracking, the upper and lower blade support bearings and guide-blocks must be properly adjusted before cutting operations.

# Adjusting Blade Guides

The blade guides provide side-to-side support to help keep the blade straight while cutting. The blade guides are designed to be adjusted in two ways—forward/backward and side-to-side. Properly adjusted blade guides are essential to making accurate cuts.

## To adjust the upper and lower blade guides:

1. Make sure that the blade is tracking properly and that it is correctly tensioned.
2. UNPLUG THE BANDSAW!
3. Familiarize yourself with the blade guide controls shown in **Figure 26**.

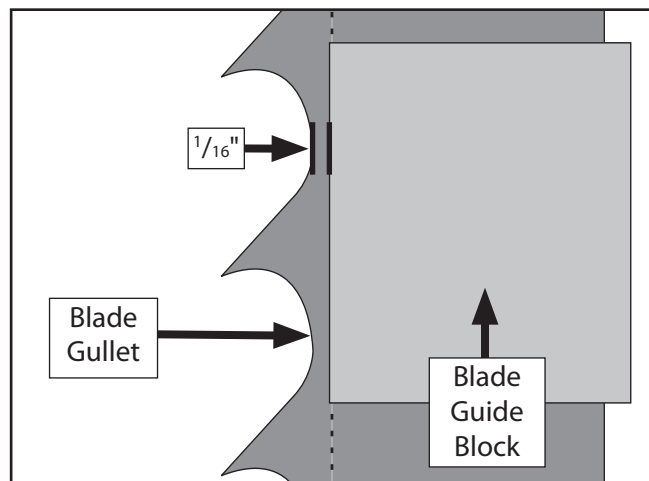


**Figure 26.** Blade guide controls.

4. Loosen the thumbscrew on the adjustment rod.



5. Move the guides forward or backward to position them laterally, so that the edges of the blocks are  $\frac{1}{16}$ " behind the blade gullets as illustrated in **Figure 27**.



**Figure 27.** Lateral adjustment of blade guides.

## NOTICE

**Make sure that the blade teeth will not contact the guide blocks when the blade is against the rear support bearing during the cut.**

6. Tighten the thumbscrew on the adjustment rod.
7. Loosen the thumbscrews that secure the guide blocks.
8. Adjust the position of the blocks 0.004" away from the blade.

**Note:** 0.004" is approximately the thickness of a piece of paper.

9. Tighten the thumbscrews.

## NOTICE

**Whenever changing a blade or adjusting tension and tracking, the upper and lower blade support bearings and guide-blocks must be properly adjusted before cutting operations.**

# Calibrating Table Tilt Scale

The pointer on the table tilt scale must be calibrated in order for the scale reading to be accurate.

**To calibrate the pointer on the table tilt scale:**

1. Make sure that the blade is tensioned and is tracking correctly, and that the table is 90° to the blade.
2. Loosen the screw on the pointer (**Figure 28**), but do not remove it.



**Figure 28.** Table tilt scale.

3. Align the tip of the pointer with the 0° mark on the table tilt scale.
4. Tighten the screw on the pointer so that the pointer is locked in place.



## Aligning Table

To ensure cutting accuracy when the table is first installed, the table should be aligned so that the miter slot is parallel to the bandsaw blade. This procedure works best with a  $\frac{3}{4}$ " blade.

### To align the miter slot parallel to the bandsaw blade:

1. Make sure that the blade is tracking properly and that it is correctly tensioned.
2. UNPLUG THE BANDSAW!
3. Loosen the trunnion bolts that secure the trunnions to the table.
4. Place an accurate straightedge along the blade. The straightedge should lightly touch both the front and back of the blade.

**Note:** Make sure the straightedge does not go across a tooth.

5. Use a fine ruler to gauge the distance between the blade and the miter slot. The distance you measure should be the same at both the front and the back of the table.
6. Adjust the table as needed for proper alignment.
7. Tighten the trunnion bolts.

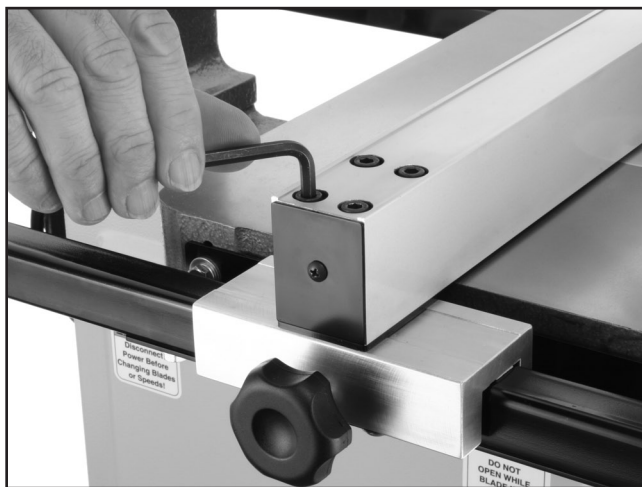
**Note:** Refer to the **Blade Lead** instructions on **Page 25** for more table alignment adjustments.

## Aligning Fence

To ensure cutting accuracy when the fence is first installed, the fence should be aligned with the miter slot.

### To align the fence parallel with the miter slot:

1. If the fence is mounted on the left-hand side of the blade, remove it and remount it next to the miter slot.
2. Loosen the four cap screws located on the top face of the fence (**Figure 29**).



**Figure 29.** Loosening the fence cap screws.

3. Adjust the fence face parallel with the edge of the miter slot.
4. Tighten the four cap screws, being careful not to move the fence.

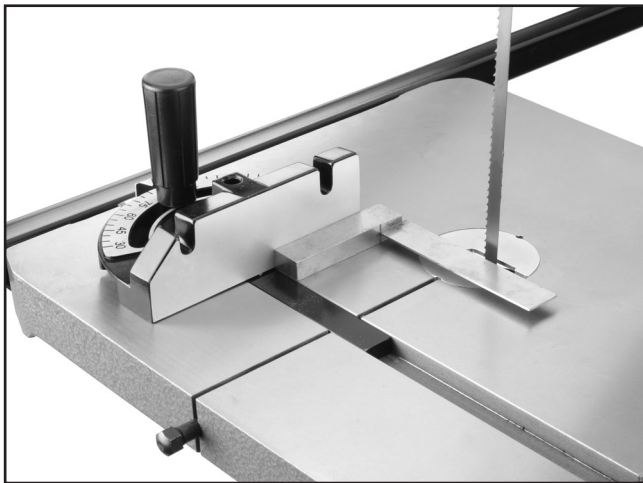
**Note:** Refer to the **Blade Lead** instructions on **Page 25** for more fence alignment adjustments.

# Miter Gauge

The miter gauge needs to be calibrated to the blade when it is first mounted in the miter slot. Refer to the **Blade Lead** section on **Page 25** for more information about typical bandsaw cutting habits.

## To calibrate the miter gauge:

1. Use a machinist's square with one edge against the face of the miter gauge and the other against the blade face as shown in **Figure 30**.



**Figure 30.** Squaring miter gauge to blade.

2. Loosen the lock knob on the miter gauge and adjust it flush with the edge of the square.
3. Tighten the lock knob, and verify the setting.

**Note:** Sometimes the tightening procedure can affect the adjustment.

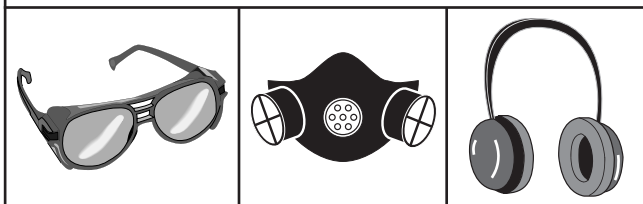
4. Loosen the screw that secures the angle pointer and adjust the pointer to the 0° mark on the scale.
5. Retighten the screw that secures the angle pointer.

# OPERATIONS

## Operation Safety

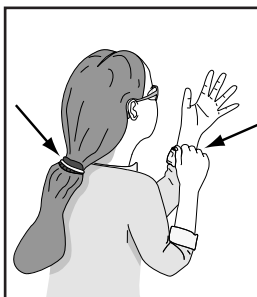
### ! WARNING

Damage to your eyes, lungs, and ears could result from using this machine without proper protective gear. Always wear safety glasses, a respirator, and hearing protection when operating this machine.



### ! WARNING

Loose hair/clothing could get caught in machinery and cause serious personal injury. Keep clothing and long hair away from moving machinery.



### NOTICE

If you have never used this type of machine or equipment before, **WE STRONGLY RECOMMEND** that you read books, trade magazines, or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

## Overview

The bandsaw is one of the most versatile wood cutting tools in the shop. It is capable of performing many different cutting functions including:

### Straight Cuts

- Miters
- Angles
- Compound Angles
- Resawing
- Ripping
- Crosscutting

### Irregular Cuts

- Simple and Complex Curves
- Duplicate Parts
- Circles
- Beveled Curves

A properly adjusted and tuned bandsaw can be safer to operate than most other saws and performs many functions with ease and accuracy.

### Here are some basic tips to follow when operating the bandsaw:

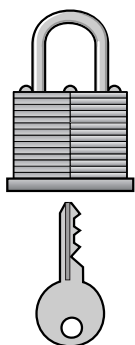
- Replace and clean blades as necessary and make adjustments periodically to keep the saw always running in top condition.
- Use light and even pressure while cutting. Light contact with the blade will permit easier line following and prevent undue friction.
- Avoid trying to turn sharp corners because this will twist the blade. Remember, you must allow the blade to saw around corners.
- Misuse of the saw or using incorrect techniques is unsafe and results in frustration and poor cuts. Remember—the blade does the cutting with the operator's guidance.

## Key Switch

The Model ST1000 features a removable key (**Figure 31**) to disable the ON/OFF switch. This feature is handy for preventing unexpected start-up or keeping unauthorized persons from operating the machine.



**Figure 31.** ST1000 ON/OFF switch.

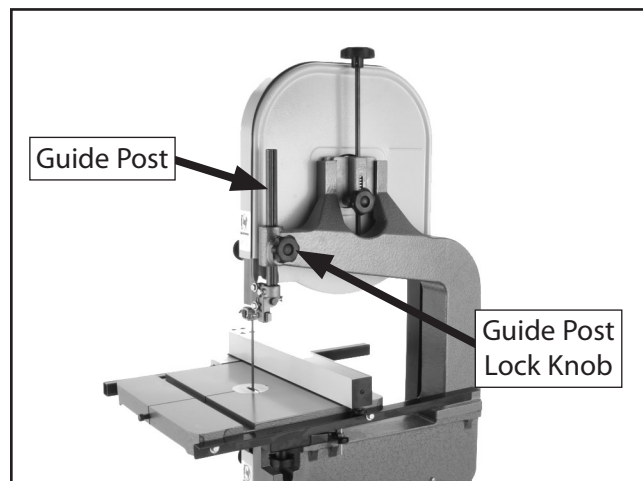


### ⚠ CAUTION

Unsupervised children and visitors inside your shop could cause serious personal injury to themselves. Lock all entrances to the shop when you are away and **DO NOT** allow unsupervised children or visitors in your shop at any time!

## Guide Post

The guide post (shown in **Figure 32**) connects the upper blade guide assembly to the bandsaw. The function of the guidepost is to allow the blade guide assembly to move up or down depending on the height of the workpiece being cut. In order to cut accurately, the blade guide assembly must be no more than 1" from the top of the workpiece at all times—this positioning provides the greatest support to the blade.



**Figure 32.** Guide post controls.

**To adjust guide post assembly alignment on the guide post:**

1. Make sure that the blade tension, blade tracking, support bearing, and blade guides are adjusted correctly.
2. Loosen the guide post lock knob shown in **Figure 32**.
3. Raise/lower the bottom of the blade guide assembly to approximately  $\frac{1}{8}$ " above the workpiece.
4. Lock the guide post in place with the lock knob.

## Blade Lead

It is common for a bandsaw blade to wander off the cut line when sawing as shown in **Figure 33**. This is called blade lead.



**Figure 33.** Blade leading away from line of cut.

### To correct blade lead:

1. Check that the miter slot or fence is parallel to the blade line, and correct if necessary.
2. Check for proper blade tension. If the blade tension is correct and it is not convenient to replace the blade, compensate for lead by skewing the fence or adjusting the table.

### To skew your fence:

1. Cut a piece of scrap wood approximately  $\frac{3}{4}$ " thick x 3" wide x 17" long. On a wide face of the board, draw a straight line parallel to the long edge.
2. Slide the fence out of the way and cut free-hand along the line. Stop at the halfway point. Turn the bandsaw **OFF** and wait for the blade to stop.
3. Clamp the board to the bandsaw table without moving it. Now slide the fence over to the board so it barely touches one end of the board.
4. Loosen the four cap screws on top of the fence.

5. Skew the fence so it is parallel to the edge of the scrap piece. You may need to re-adjust the fence locking mechanisms to gain maximum adjustment.
6. While maintaining the skew, tighten the cap screws.

### To shift the table:

1. Cut a piece of scrap wood approximately  $\frac{3}{4}$ " thick x 3" wide x 17" long. On a wide face of the board, draw a straight line parallel to the long edge.
2. Slide the fence out of the way and cut free-hand along the line. Stop at the halfway point. Turn the bandsaw **OFF** and wait for the blade to stop.
3. Clamp the board to the bandsaw table without moving it.
4. Loosen the table mounting bolts. Shift the table to compensate for the blade lead.
5. Repeat **Steps 1-4** until the blade cuts straight.
6. Tighten the table bolts.

## Table Tilt

The bandsaw table will tilt 15° left and 45° right to provide a wide range of cutting options. Remove the positive stop bolt to tilt the table to the left.

### To tilt the table:

1. Loosen the two plastic knobs underneath the table that lock the table trunnion.
2. Position the table to the desired angle. Refer to the angle gauge on the front table trunnion for the angle.
3. Retighten both plastic knobs.

## Ripping

Ripping is the process of cutting with the grain of the wood stock. For plywood and other processed wood, ripping simply means cutting down the length of the workpiece.

### To rip with the Model ST1000:

1. Adjust the fence to match the width of the cut on your workpiece and lock the fence in place.
2. Lower the blade guides to approximately  $\frac{1}{4}$ " above the workpiece.
3. Make sure all safety precautions have been taken and start the bandsaw.

### WARNING

**NEVER** place fingers or hands in the line of cut. In the event that something unexpected happens, your hands or fingers may be pulled into the blade. **ALWAYS** use a push stick when ripping narrow pieces. Failure to follow these warnings may result in serious personal injury!

4. Slowly feed the workpiece into the blade and continue with the cut until the blade is completely through the workpiece. **Figure 34** shows a typical ripping operation.

**Note:** If you are cutting narrow pieces, use a push stick to protect your fingers.



**Figure 34.** Ripping with a push stick.

## Crosscutting

Crosscutting is the process of cutting across the grain of wood. For plywood and other processed wood, crosscutting simply means cutting across the width of the material.

### To crosscut with the Model ST1000:

1. Mark the workpiece on the edge where you want to begin the cut.
2. Move the fence out of the way. Place the workpiece evenly against the miter gauge.
3. Lower the blade guides to approximately  $\frac{1}{4}$ " above the workpiece.
4. Line up the mark with the blade.
5. After all safety precautions have been met, turn the bandsaw **ON**. Slowly feed the workpiece into the blade and continue the cut until the blade is all the way through the workpiece. **Figure 35** shows a typical crosscutting operation.



**Figure 35.** Crosscutting with miter gauge.

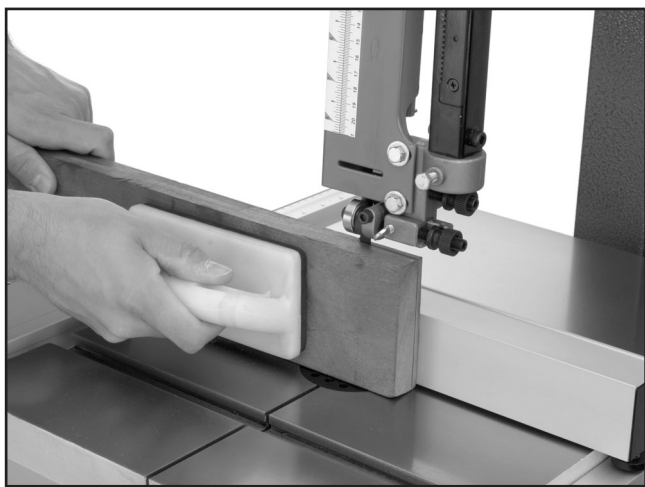


# Resawing

Resawing (**Figure 36**) is the process of cutting a board into two or more thinner boards. The maximum board width that can be resawn is limited by the maximum cutting height of the bandsaw. Maximum cutting height for this bandsaw is 6".

The Model ST1000 14" Bandsaw is capable of resawing, provided the saw is properly set up. Attempting to resaw too tall or too dense of a board may put excessive strain on the blade and cause breakage.

One of the most important considerations when resawing is blade selection. Generally, the wider blade, the better. In most applications, a hook or a skip tooth style will be desirable. Also, since most resawn lumber will be planed smooth, you should choose blades with fewer teeth-per-inch (from 3 to 6). While blades with fewer teeth-per-inch produce rougher cuts, these types of blades offer larger gullet capacities for clearing sawdust.



**Figure 36.** Resawing lumber.

## To resaw a workpiece:

1. Verify that the bandsaw is setup properly and that the table is perpendicular to the blade.
2. Use the widest blade your bandsaw will accept. *The blade must also be sharp and clean.*
3. Use a fence to guide the workpiece.
4. Set your fence to the desired width of cut and lock it in place. Or, draw a reference line on the edge of the board, place the board against the fence, line up the reference line with the blade and lock the fence in place.
5. Support the ends of the board if necessary.
6. Turn the bandsaw **ON**.
7. Using push paddles and a push stick, keep pressure against the fence and table, and slowly feed the workpiece into the moving blade until the blade is completely through the workpiece.
8. Feed material very slowly. Unsatisfactory results are often attributed to a feed rate too fast and a blade with too many TPI.



# Cutting Curves

When cutting curves, simultaneously feed and turn the stock carefully so that the blade follows the layout line without twisting. If a curve is so abrupt that it is necessary to repeatedly back up and cut a new kerf, use either a narrower blade or a blade with more TPI (teeth per inch).

Always make short cuts first, then proceed to the longer cuts. Relief cuts will also reduce the chance that the blade will be pinched or twisted. Relief cuts are cuts made through the waste portion of the workpiece and are stopped at the layout line. As you cut along the layout line, waste wood is released from the workpiece, alleviating any pressure on the back of the blade. Relief cuts also make backing the workpiece out easier, if needed.

## NOTICE

The list below displays blade widths and the corresponding minimum radii of each size of blade for the Model ST1000.

Width	Radius
1/8".....	1/8"
3/16".....	3/8"
1/4".....	5/8"
3/8".....	1 1/4"
1/2".....	2 1/2"
5/8".....	3 3/4"
3/4".....	5 1/2"

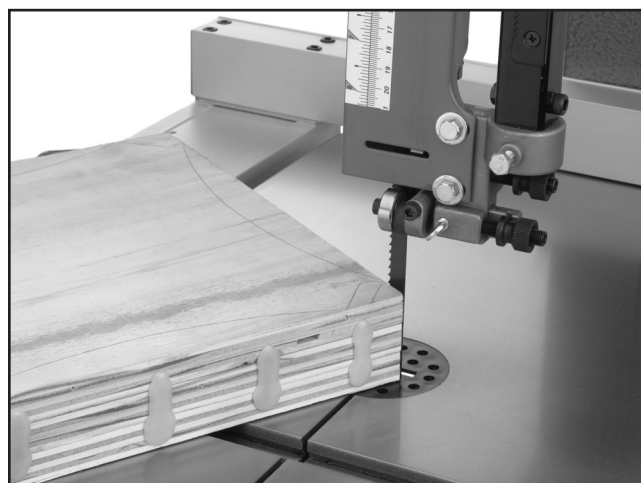
# Stacked Cuts

Bandsaws have the ability to cut multiple copies of a particular shape by stacking workpieces together.

Before making stacked cuts, ensure that both the table and the blade are properly adjusted to 90°. Otherwise, any error will be compounded with each piece cut from the top to the bottom of the stack.

## To complete a stacked cut:

1. Align your pieces from top to bottom to ensure that each piece has adequate scrap to provide a clean, unhampered cut.
2. Secure all the pieces together in a manner that will not interfere with the cutting. Hot glue on the edges works well, as do brad nails through the waste portion. (Be careful not to cut into the brads!)
3. On the face of the top piece, lay out the shape you intend to cut.
4. Make relief cuts perpendicular to the outline of your intended shape in areas where changes in blade direction could strain the woodgrain or cause the blade kerf to bind.
5. Cut the stack of pieces as though you were cutting a single piece. Follow your layout line with the blade kerf on the waste side of your line as shown in **Figure 37**.



**Figure 37.** Cutting multiple pieces at once.

# Blade Information

Selecting the right blade requires a combination of the various blade characteristics mentioned below, the type of material you plan to cut, and the type of cut you are going to perform.

## Blade Length

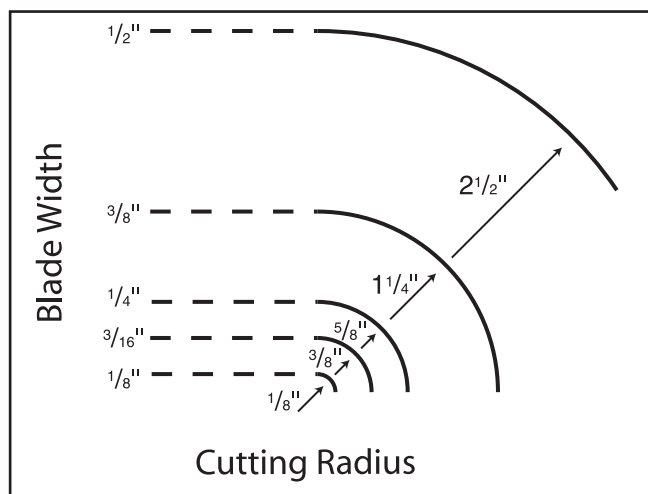
Measured by the circumference, blade lengths are usually unique to the brand of your bandsaw and the distance between wheels. The Model ST1000 is designed for blades that are 92<sup>1</sup>/<sub>2</sub>"-93<sup>1</sup>/<sub>2</sub>" long.

## Blade Width

Measured from the back of the blade to the tip of the blade tooth (the widest point), blade width is often the first consideration given to blade selection. Blade width dictates the largest and smallest curve that can be cut, as well as how accurately it can cut a straight line.

The Model ST1000 can use blades from 1/8" to 3/4" in width. Always pick the size of blade that best suits your application.

- **Curve Cutting**—Use the chart in **Figure 38** to determine the correct blade for curve cutting. Determine the smallest radius curve that will be cut on your workpiece and use the corresponding blade width.



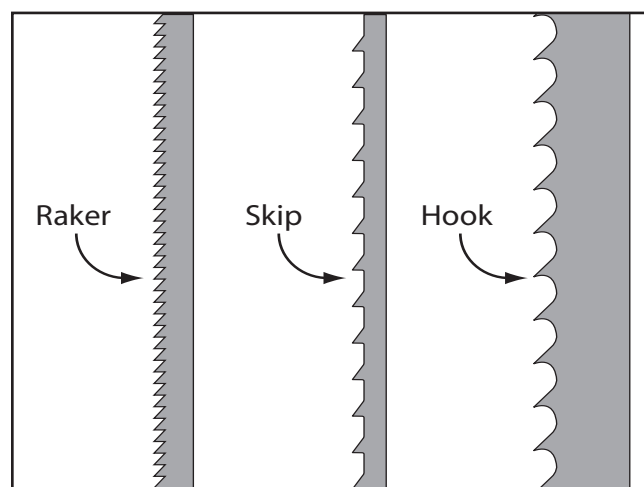
**Figure 38.** Blade width radii.

- **Straight Cutting**—Use the largest width blade that you own. The Model ST1000 will accept blades up to 3/4" wide. Narrow blades can cut tight curves (a small radius) but are not very good at cutting straight lines because they naturally wander (blade lead). However, larger blades are much better at cutting straight lines, but function poorly at cutting small curves because of their size.

## Tooth Style

When selecting blades, another option to consider is the shape, gullet size, teeth set and teeth angle—otherwise known as "Tooth Style."

**Figure 39** shows the three main categories of tooth style:



**Figure 39.** Raker, Skip & Hook tooth styles.

- **Raker**—This style is considered to be the standard because the tooth size and shape are the same as the tooth gullet. The teeth on Raker blades usually are very numerous, have no angle, and produce cuts by scraping the material; these characteristics result in very smooth cuts, but do not cut fast and generate more heat while cutting.
- **Skip**—This style is similar to a raker blade that is missing every other tooth. Because of the design, skip toothed blades have a much larger gullet than raker blades, and therefore, cut faster and generate more heat. However, these blades also leave a rougher cut than raker blades.

- **Hook**—The teeth on this style have a positive angle (downward) which makes them dig into the material, and the gullets are usually rounded for easier waste removal. These blades are excellent for the tough demands of resawing and ripping thick material.

## **Tooth Pitch**

Usually measured as TPI (teeth per inch), tooth pitch determines the size of the teeth. More teeth per inch (fine pitch) will cut slower, but smoother; while fewer teeth per inch (coarse pitch) will cut rougher, but faster. As a general rule, choose blades that will have at least three teeth in the material at all times. Use fine pitched blades on harder woods and coarse pitched blades on softer woods.

## **Blade Care**

A bandsaw blade is a delicate piece of steel that is subjected to tremendous strain. You can obtain longer use from a bandsaw blade if you give it fair treatment and always use the appropriate feed rate for your operation.

Be sure to select blades with the proper width, style, and pitch for each application. The wrong choice of blades will often produce unnecessary heat which will shorten the life of your blade.

A clean blade will perform much better than a dirty blade. Dirty or gummed up blades pass through the cutting material with much more resistance than clean blades. This extra resistance also causes unnecessary heat.

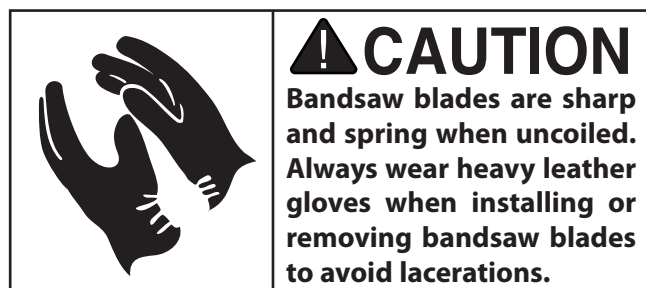
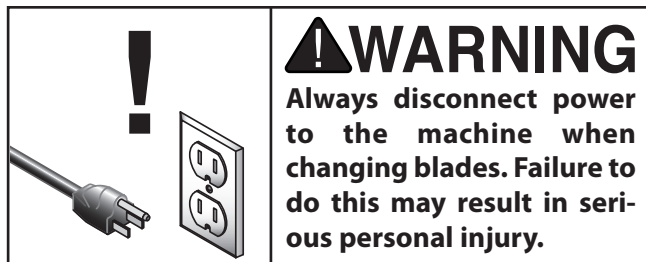
## **Blade Breakage**

Many conditions may cause a bandsaw blade to break. Blade breakage is unavoidable, in some cases, since it is the natural result of the peculiar stresses that bandsaw blades are subjected to. Blade breakage is also due to avoidable circumstances. Avoidable breakage is most often the result of poor care or judgement on the part of the operator when mounting or adjusting the blade or support guides.

### **The most common causes of blade breakage are:**

- Faulty alignment and adjustment of the guides.
- Forcing or twisting a wide blade around a curve of short radius.
- Feeding the workpiece into the blade too fast.
- Tooth dullness or absence of sufficient set.
- Incorrect tension.
- Top blade guide assembly set too high above the workpiece.
- Using a blade with a lumpy or improperly finished braze or weld.
- Continuously running the bandsaw when not in use.

# Blade Changes



## To remove the blade:

1. UNPLUG THE BANDSAW!
2. Release blade tension by turning the blade tension knob counterclockwise.
3. Remove the table insert and the table pin. Adjust the upper and lower guide blocks away from the blade.
4. Put on heavy leather gloves.
5. Open the upper and lower wheel covers and slide the blade off both wheels.
6. Rotate the blade 90° and slide through the slot in the table.

## To replace the blade:

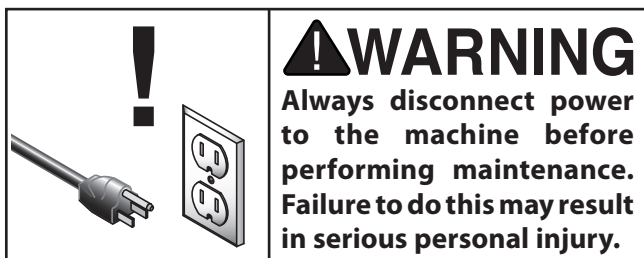
1. Put on heavy leather gloves.
2. Slide the blade through the table slot, ensuring that the teeth are pointing down toward the table. **Note:** If the teeth will not point downward in any orientation, the blade is inside-out. Put on heavy gloves, remove the blade, and twist it right side-out.
3. Slip the blade through the guides, and mount it on the upper and lower wheels (**Figure 40**).



**Figure 40.** Placing blade on the wheels.

4. Apply tension to the blade by turning the tension control knob. Rotate the upper wheel slowly by hand as tension is applied to allow the blade to center itself on the wheel. Adjust tracking if needed.
5. Adjust the upper and lower guide blocks and the support bearings.
6. Close the wheel covers.
7. Replace the table insert and table pin, being sure not to use excessive force when inserting the table pin.

# MAINTENANCE



## Schedule

For optimum performance from your machine, follow this maintenance schedule and refer to any specific instructions given in this section.

### Daily Check:

- Loose mounting bolts.
- Damaged saw blade.
- Worn or damaged wires.
- Any other unsafe condition.

### Monthly Check:

- V-belt tension, damage, or wear.
- Clean and vacuum dust buildup from inside wheel covers and off of motor.

## Cleaning

Cleaning the Model ST1000 is relatively easy. Vacuum excess wood chips and sawdust, and wipe off the remaining dust with a dry cloth. If any resin has built up, use a resin dissolving cleaner to remove it. Treat all unpainted cast iron and steel with a non-staining lubricant after cleaning.

## Unpainted Cast Iron

Protect the unpainted cast iron surfaces on the table by wiping the table clean after every use—this ensures moisture from wood dust does not remain on bare metal surfaces.

Keep tables rust-free with regular applications of quality lubricants or surface protectants.

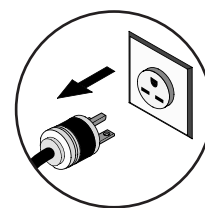
## Lubrication

Sealed and pre-lubricated ball bearings require no lubrication for the life of the bearings. All bearings are standard sizes, and replacements can be purchased from our parts department or a bearing supply store.

For adjustment controls, an occasional “shot” of light oil is just about all that is necessary. Wipe off any sawdust with a clean cloth, towel or dry paint brush, and spray on the lubricant. Do not get oil on the pulleys or V-belt because it could cause belt deterioration and slipping.

# SERVICE

## Troubleshooting



This section covers the most common problems and corrections with this type of machine.

**WARNING! DO NOT make any adjustments until power is disconnected and moving parts have come to a complete stop!**

### Motor

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Machine does not start or a breaker trips.	<ol style="list-style-type: none"> <li>1. Plug/receptacle is at fault or wired incorrectly.</li> <li>2. Start capacitor is at fault.</li> <li>3. Motor connection wired incorrectly.</li> <li>4. Power supply is at fault/switched OFF.</li> <li>5. Lockout key is at fault.</li> <li>6. Motor ON button or ON/OFF switch is at fault.</li> <li>7. Wiring is open/has high resistance.</li> <li>8. Motor is at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Test for good contacts; correct the wiring.</li> <li>2. Test/replace if faulty.</li> <li>3. Correct motor wiring connections.</li> <li>4. Ensure hot lines have correct voltage on all legs and main power supply is switched ON.</li> <li>5. Install/replace lockout key; replace switch.</li> <li>6. Replace faulty ON button or ON/OFF switch.</li> <li>7. Check for broken wires or disconnected/corroded connections, and repair/replace as necessary.</li> <li>8. Test/repair/replace.</li> </ol>
Machine stalls or is underpowered.	<ol style="list-style-type: none"> <li>1. Wrong workpiece material (wood).</li> <li>2. Workpiece alignment is poor.</li> <li>3. Run capacitor is at fault.</li> <li>4. Plug/receptacle is at fault.</li> <li>5. Motor wired incorrectly.</li> <li>6. Blade is slipping on wheels.</li> <li>7. Motor bearings are at fault.</li> <li>8. Machine is undersized for the task.</li> <li>9. Motor has overheated.</li> <li>10. Motor is at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Use wood with correct moisture content, without glues, and little pitch/resins.</li> <li>2. Eliminate workpiece binding; use jig, fence, guide, clamps, roller table, or pushblocks as required for workpiece alignment control.</li> <li>3. Test/repair/replace.</li> <li>4. Test for good contacts; correct the wiring.</li> <li>5. Correct motor wiring connections.</li> <li>6. Adjust blade tracking and tension to factory specifications.</li> <li>7. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.</li> <li>8. Use sharp blade with lower TPI; reduce the feed rate/depth of cut.</li> <li>9. Allow motor to cool, clean it off, and reduce workload.</li> <li>10. Test/repair/replace.</li> </ol>
Machine has vibration or noisy operation.	<ol style="list-style-type: none"> <li>1. Bad blade weld or broken teeth.</li> <li>2. V-belt(s) worn or loose.</li> <li>3. Motor fan is rubbing on fan cover.</li> <li>4. Pulley is loose.</li> <li>5. Machine is incorrectly mounted or sits unevenly on floor.</li> <li>6. Motor bearings are at fault.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace blade or grind weld smooth.</li> <li>2. Inspect/replace belts with a new matched set.</li> <li>3. Replace dented fan cover; replace loose/damaged fan.</li> <li>4. Realign/replace shaft, pulley, setscrew, and key as required.</li> <li>5. Tighten/replace anchor studs in floor; relocate/shim machine.</li> <li>6. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.</li> </ol>



## Operation

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Blade slows when cutting. Blade makes a squealing noise, especially on start-up.	<ol style="list-style-type: none"> <li>1. V-belts loose.</li> <li>2. V-belts worn out.</li> </ol>	<ol style="list-style-type: none"> <li>1. Tighten V-belts.</li> <li>2. Replace V-belts.</li> </ol>
Blade does not run evenly on wheels or runs off.	<ol style="list-style-type: none"> <li>1. Tracking is not adjusted properly.</li> <li>2. Rubber tire on wheel is damaged or worn.</li> <li>3. Wheels are not co-planar.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust tracking.</li> <li>2. Replace rubber tires.</li> <li>3. Adjust wheel co-planarity.</li> </ol>
Blade does not cut evenly.	<ol style="list-style-type: none"> <li>1. Blade tension is incorrect.</li> <li>2. Tooth set is uneven.</li> <li>3. Teeth are sharper on one side than the other.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust tension.</li> <li>2. Replace blade, or have it professionally sharpened.</li> <li>3. Replace blade, or have it professionally sharpened.</li> </ol>
Wood cuts slow or smokes during cut.	<ol style="list-style-type: none"> <li>1. Worn or dull blade, missing teeth.</li> <li>2. Blade installed backwards.</li> <li>3. Wrong teeth per inch.</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace blade.</li> <li>2. Check blade rotation and reverse blade if necessary.</li> <li>3. Use a blade with fewer teeth per inch.</li> </ol>
Blade will not cut a straight line.	<ol style="list-style-type: none"> <li>1. Blade tension is incorrect.</li> <li>2. Blade too narrow.</li> <li>3. Blade guides need adjustment.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust blade tension.</li> <li>2. Use wider blade.</li> <li>3. Adjust blade guides.</li> </ol>
Blade comes off of wheel.	<ol style="list-style-type: none"> <li>1. Blade tension is incorrect.</li> <li>2. Blade guides need adjustment.</li> <li>3. Feeding workpiece too fast.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust blade tension.</li> <li>2. Adjust blade guides.</li> <li>3. Feed workpiece slower.</li> </ol>
Blade breaks frequently.	<ol style="list-style-type: none"> <li>1. Blade tension is incorrect.</li> <li>2. Blade guides need adjustment.</li> <li>3. Cutting corners too sharply.</li> </ol>	<ol style="list-style-type: none"> <li>1. Adjust blade tension.</li> <li>2. Adjust blade guides.</li> <li>3. Use a wider arc on outside cuts, or use relief cuts to make tight inside cuts.</li> </ol>
Sawdust build-up inside wheel covers.	<ol style="list-style-type: none"> <li>1. Clogged dust port.</li> <li>2. Low CFM (airflow) from dust collection system.</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean out dust port.</li> <li>2. Three options: <ul style="list-style-type: none"> <li>—Check dust lines for leaks or clogs.</li> <li>—Move dust collector closer to saw.</li> <li>—Install a stronger dust collector.</li> </ul> </li> </ol>
Burn marks on the edge of the cut.	<ol style="list-style-type: none"> <li>1. Too much side pressure when feeding workpiece.</li> <li>2. Blade too wide for size of radius being cut.</li> </ol>	<ol style="list-style-type: none"> <li>1. Feed workpiece straight into the blade.</li> <li>2. Install a smaller width blade, and/or increase blade tension.</li> </ol>
Rough or poor quality cuts.	<ol style="list-style-type: none"> <li>1. Feeding workpiece too fast.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce feed rate.</li> </ol>
Blade contacting table insert.	<ol style="list-style-type: none"> <li>1. Excessive side pressure when cutting.</li> <li>2. Table improperly adjusted.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduce side pressure.</li> <li>2. Adjust table.</li> </ol>

# Checking V-Belt

To ensure optimum power transmission from the motor to the blade, the V-belt must be in good condition and operate under proper tension. The belts should be checked for cracks, fraying, and wear. Belt tension should be checked at least every 3 months—more often if the bandsaw is used daily.

## To check the V-belt:

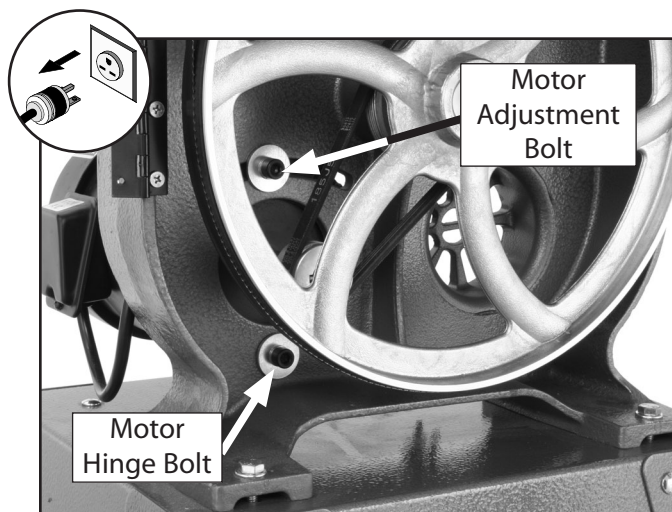
1. UNPLUG THE BANDSAW!
2. Open the lower wheel cover.
3. Push the center of the V-belt. Note the amount of deflection. If deflection is more than approximately  $\frac{3}{4}$ " with moderate pressure from your thumb or finger, tighten the V-belt.
4. Note the condition of the V-belt. If the V-belt is cracked, frayed, or glazed; it should be replaced as soon as convenient.

# Tensioning V-Belt

Tools Needed:		Qty
Hex Wrench 6mm .....		1
Wrench 13mm .....		1

## To tension the V-belt:

1. UNPLUG THE BANDSAW!
2. Open the lower wheel cover.
3. Loosen the motor mount bolts shown in **Figure 41**.



**Figure 41.** Motor mount bolts.

4. Move the body of the motor, sliding the adjustment bolt to the left-hand side (facing bandsaw front) of the adjustment slot.
5. Hold the motor in position with one hand and tighten the motor adjustment bolt with the other hand.
6. Push the center of the V-belt. If deflection is approximately  $\frac{3}{4}$ " with moderate pressure from your thumb or finger, then the tension is correct. If the deflection is more than  $\frac{3}{4}$ ", repeat **Steps 3-6**.
7. When the V-belt tension is correct, tighten the motor hinge bolt and close the lower wheel cover.

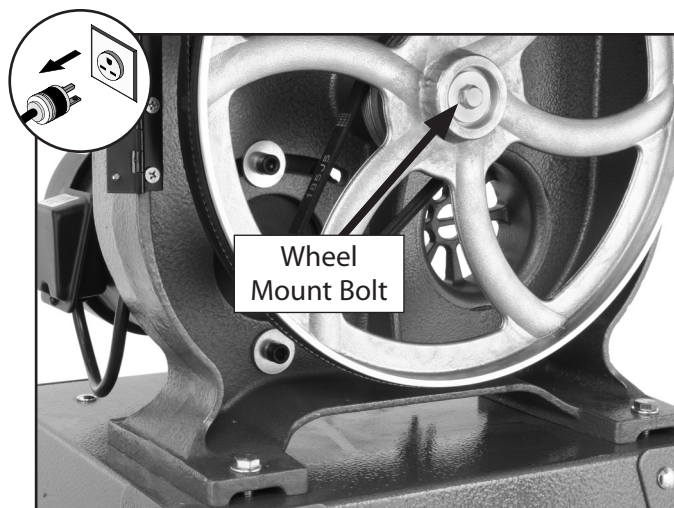
# Replacing V-Belt

## Tools Needed:

	Qty
Hex Wrench 6mm .....	1
Wrench 13mm .....	1

## To replace the V-belt:

1. UNPLUG THE BANDSAW!
2. Open both wheel covers, and remove the blade.
3. Loosen the motor mount bolts shown in **Figure 41**.
4. Move the body of the motor so that the motor adjustment bolt slides to the right-hand side (facing bandsaw front) of the adjustment slot and pull the V-belt off of the motor pulley.
5. Unthread the wheel mount bolt shown in **Figure 42** and slide the lower wheel off of the bearing shaft.
6. Slip the old V-belt off of the wheel pulley and install the new V-belt in its place.
7. Install the lower wheel back onto the bearing shaft and replace/tighten the wheel mount bolt.
8. Position the V-belt over the motor pulley. Move the body of the motor so that the motor adjustment bolt slides to the left-hand side (facing bandsaw front) of the adjustment slot.
9. Hold the motor in position with one hand and tighten the motor adjustment bolt with the other hand.
10. Check the V-belt tension and adjust if necessary as described in the **Tensioning V-Belt** instructions.
11. When the V-belt tension is correct, tighten the motor hinge bolt and close the lower wheel cover.



**Figure 42.** Wheel mount bolt.

# Wheel Alignment

Wheel alignment is one of the easiest ways to ensure you get optimal performance from your bandsaw. When wheels are aligned, or coplanar, the bandsaw is more likely to cut straight without wandering; and vibration, heat, and blade wear are considerably decreased because the blade is automatically balanced on the wheel. This is known as “Coplanar Tracking.”

**To verify if the upper and lower wheels are coplanar:**

1. UNPLUG THE BANDSAW!
2. Remove the table.
3. With the blade on and properly tensioned, hold a straightedge close to the center of both wheels. Make sure the straightedge fully extends across the wheels as shown in **Figure 43**.



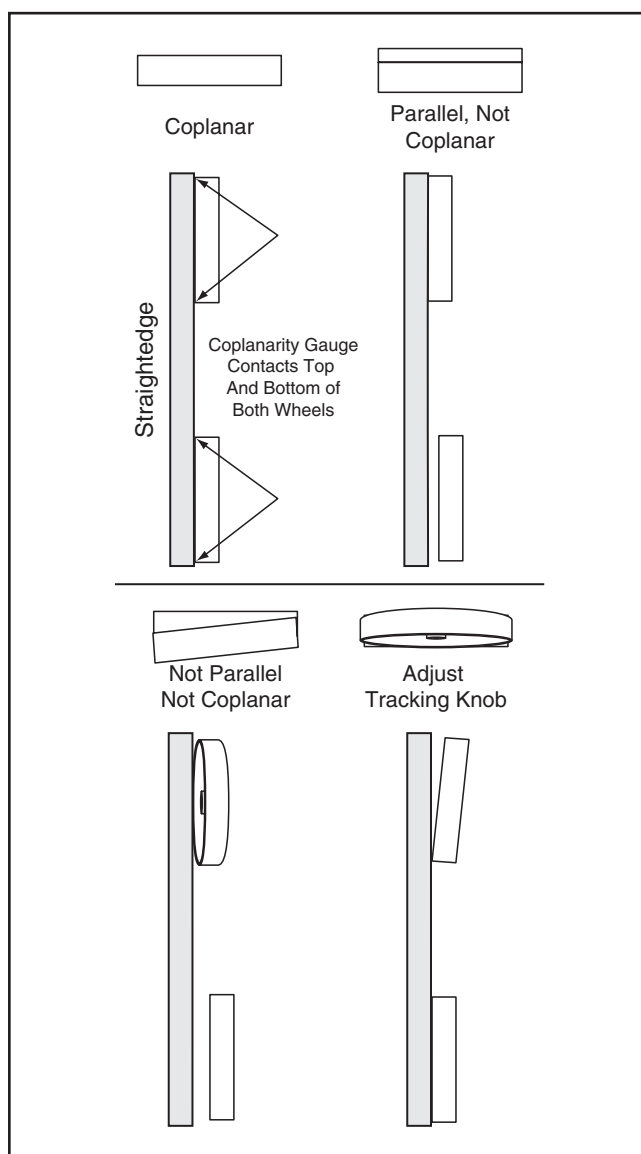
**Figure 43.** Checking wheel alignment.

4. A perfectly coplanar set of wheels will allow the straightedge to touch the top and bottom of the outside rims on each wheel. If this is the case with your wheels, then they are coplanar.

5. If your wheels are not coplanar, check them for adjustment by placing the straightedge on the lower wheel first, ensuring that it touches both the top and bottom of the rim, and adjust the tracking knob to see how the straightedge lines up with the upper wheel. If the straightedge will not touch the top and bottom rim of the upper wheel evenly, first determine if the upper wheel needs to be moved forward or backward. You can only shim the wheels to come forward.

—If the upper wheel is behind the straightedge, then the upper wheel can be shimmed.

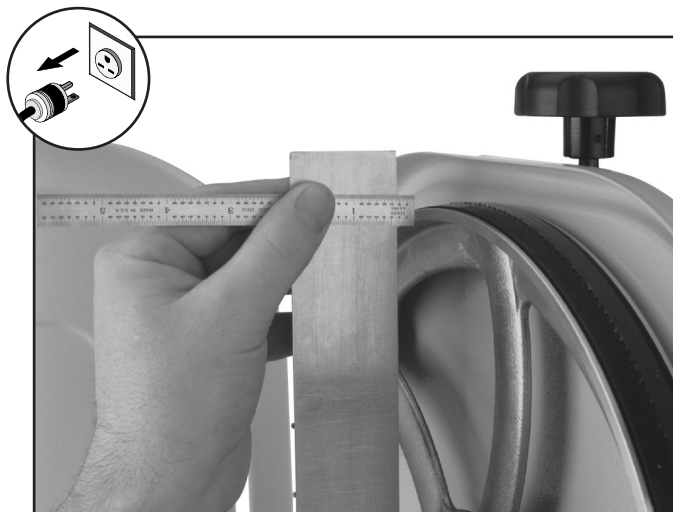
—If the upper wheel comes forward from the plane of the lower wheel, the lower wheel needs to be shimmed forward, so the straight-edge lines up even with both wheels.



**Figure 44.** Understanding coplanar alignment.

### To Shim a Wheel:

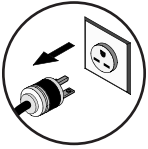
1. Adjust the tracking knob so that the top wheel is parallel with the bottom wheel. With the straightedge touching both points of the wheel that does not need to be adjusted (**Figure 45**), measure the distance away from the incorrect wheel with a fine ruler. The distance you measured with the ruler is the distance the wheel must be corrected.



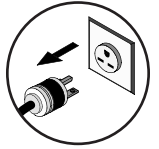
**Figure 45.** Measuring wheel difference.

2. Remove the blade from the saw, then remove the securing nut and the washers from the wheel that needs to be shimmed. Take the wheel off.
3. Electrical washers work well for shimming because they are offered in a wide range of thicknesses. Measure how many you will need and place them on the mounting shaft.
4. Replace the wheel, any remaining washers, and the securing nut. Install and tension the blade, as it will be used during operation before you check the wheels. Often the wheels may be coplanar with the blade loose, then be pulled out of alignment when it is tightened.
5. The first time you get the wheels coplanar, place a mark on each wheel where you held the straightedge. This assures repeated accuracy every time you adjust your wheels.

When wheels are properly coplanar, the blade may not be centered on the crown of the wheel, but it will be balanced.



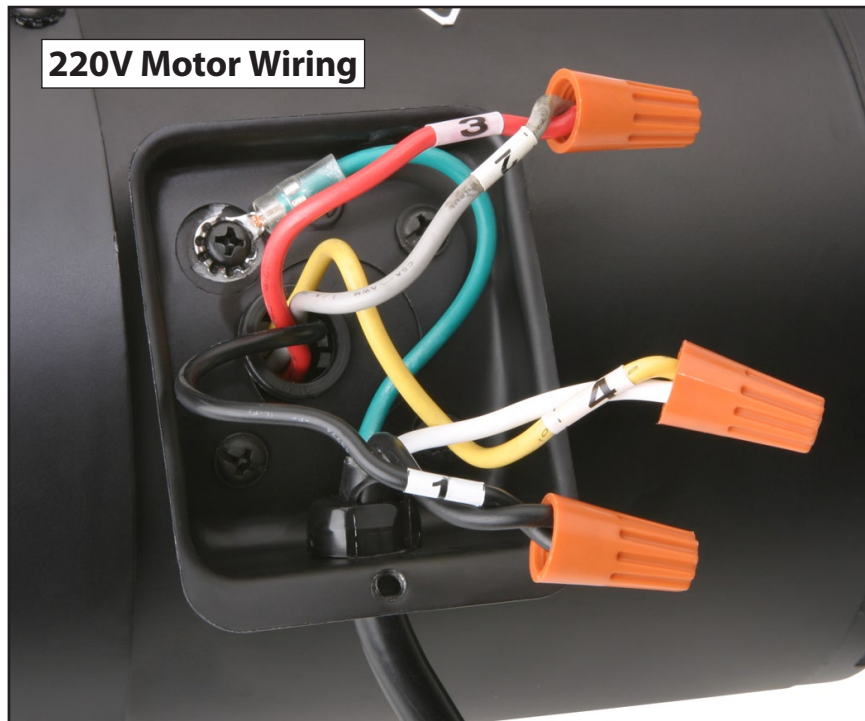
# ST1000 Electrical Components



**110V Motor Wiring**

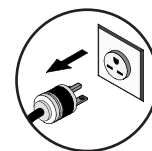
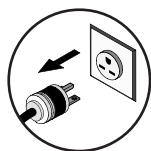


**220V Motor Wiring**

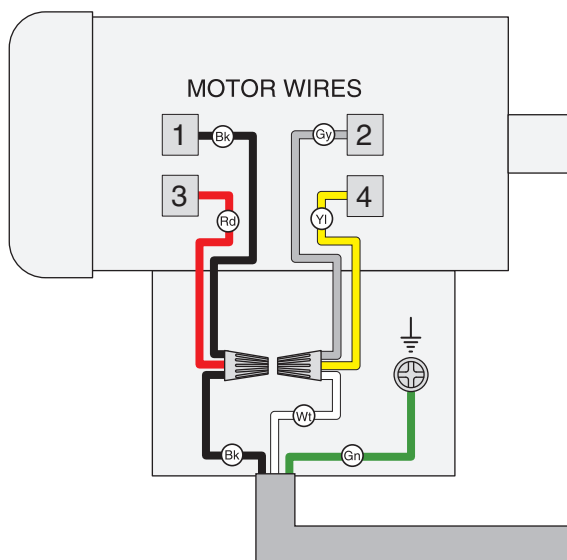




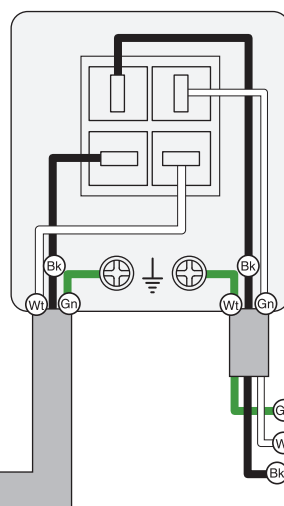
# ST1000 Wiring Diagram



## 110 Volt (Prewired)

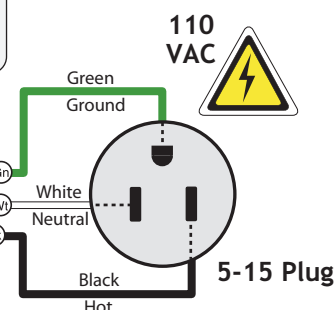


## PADDLE SWITCH (viewed from behind)

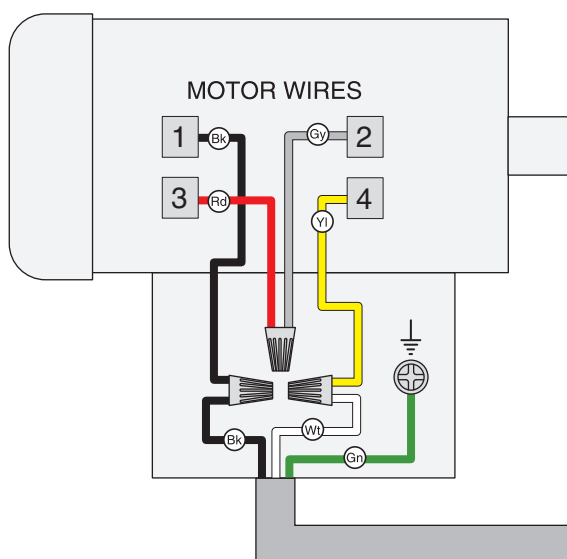


## **⚠ DANGER**

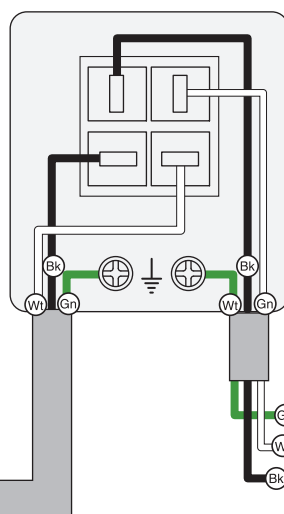
Disconnect power before performing any electrical service. Electricity presents serious shock hazards that will result in severe personal injury and even death!



## 220 Volt

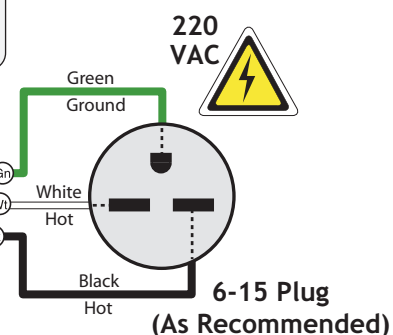


## PADDLE SWITCH (viewed from behind)

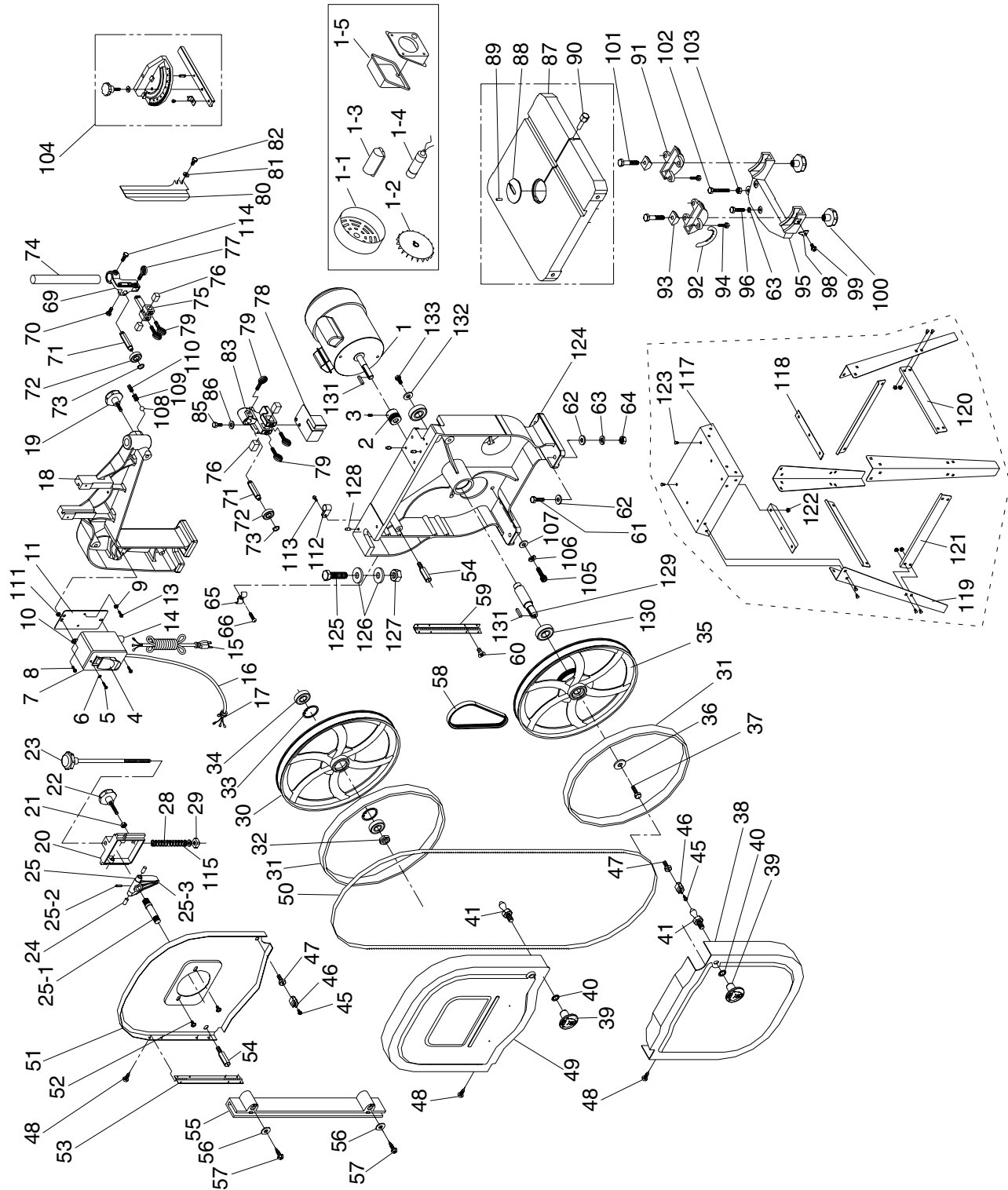


## COLOR KEY

BLACK	
WHITE	
GREEN	
RED	
YELLOW	
GRAY	



# Main Breakdown



# Main Breakdown Parts List

REF	PART #	DESCRIPTION
1	XST1000001	MOTOR 3/4HP 110/220V
1-1	XST1000001-1	FAN COVER
1-2	XST1000001-2	FAN
1-3	XST1000001-3	CAPACITOR COVER
1-4	XPC200	CAPACITOR 200 MFD, 125 V
1-5	XST1000001-5	ELECTRICAL BOX
2	XST1000002	MOTOR PULLEY
3	XPSS01M	SET SCREW M6-1 X 10
4	XST1000004	SAFETY PADDLE SWITCH
5	XPHEK13M	TAP SCREW M3.5 X 12
6	XPW05M	FLAT WASHER 4MM
7	XST1000007	SWITCH ENCLOSURE BRACKET
8	XPS40M	PHLP HD SCR M5-.8 X 16
9	XPTLW02M	EXT TOOTH WASHER 5MM
10	XST1000010	SWITCH ENCLOSURE
11	XST1000011	SWITCH PLATE
13	XPS19M	PHLP HD SCR M5-.8 X 6
14	XST1000014	STRAIN RELIEF
15	XPWRCRD110L	POWER CORD
16	XPWRCRD110S	MOTOR CORD
17	XST1000017	STRAIN RELIEF
18	XST1000018	UPPER FRAME ARM
19	XST1000019	KNOB BOLT M10-1.5 X 25
20	XST1000020	UPPER WHEEL SLIDING BRACKET
21	XPN03M	HEX NUT M8-1.25
22	XST1000022	KNOB BOLT M8-1.25 X 45
23	XST1000023	BLADE ADJUSTING SCREW ASSY
24	XST1000024	STEEL PIN
25	XST1000025	UPPER WHEEL SHAFT HINGE
25-1	XST1000025-1	UPPER WHEEL SHAFT
25-2	XPRP04M	ROLL PIN 4 X 24
25-3	XST1000025-3	UPPER WHEEL SHAFT HINGE
28	XST1000028	COIL SPRING
29	XST1000029	SQUARE NUT M10-1.5
30	XST1000030	UPPER WHEEL
31	XST1000031	WHEEL TIRE
32	XPN24M	HEX NUT M12-1.25
33	XPR21M	INT RETAINING RING 35MM
34	XP620	BEARING 620ZZ
35	XST1000035	LOWER WHEEL
36	XPW01M	FLAT WASHER 8MM
37	XPB81M	HEX BOLT M8-1.25 X 20 (LH)
38	XST1000038	LOWER WHEEL GUARD
39	XST1000039	KNOB M8-1.25
40	XPTLW03M	INT TOOTH WASHER 8MM
41	XST1000041	LATCH STUD M8-1.25 X 14
45	XPS08M	PHLP HD SCR M5-.8 X 12
46	XST1000046	CATCH
47	XST1000047	LATCH STUD M8-1.25 X 14

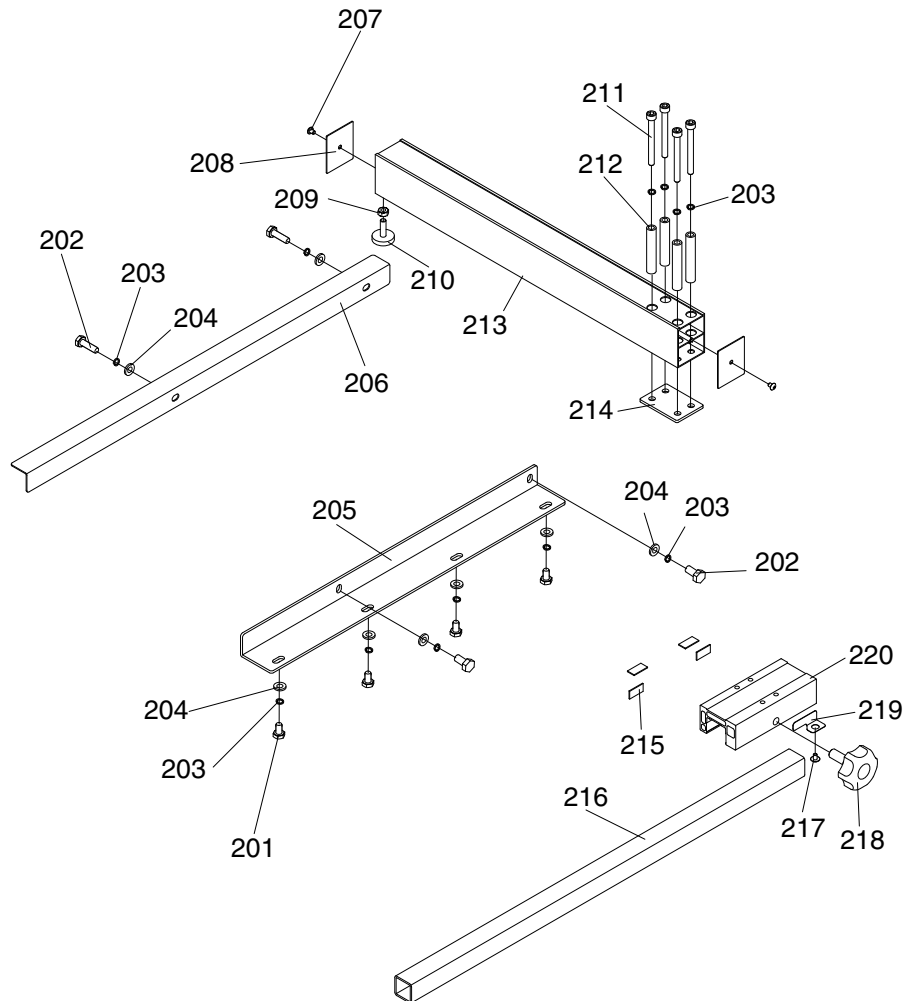
REF	PART #	DESCRIPTION
48	XPHEK4M	TAP SCREW M4 X 8
49	XST1000049	COVER UPPER FRONT
50	XST1000050	SAW BLADE 6TPI X 93-1/2"
51	XST1000051	COVER UPPER BACK
52	XPFS01M	FLANGE SCREW M5-.8 X 8
53	XST1000053	HINGE UPPER
54	XST1000054	STUD
55	XST1000055	SAW BLADE GUARD
56	XPW05M	FLAT WASHER 4MM
57	XPHEK2M	TAP SCREW M3.5 X 16
58	XST1000058	BELT 1850SJ
59	XST1000059	LOWER HINGE
60	XPFH07M	FLAT HD SCR M5-.8 X 10
61	XPB20M	HEX BOLT M8-1.25 X 35
62	XPW01M	FLAT WASHER 8MM
63	XPLW04M	LOCK WASHER 8MM
64	XPN03M	HEX NUT M8-1.25
65	XST1000065	CORD CLAMP
66	XPS08M	PHLP HD SCR M5-.8 X 12
69	XST1000069	GUIDE SUPPORT BRACKET
70	XPTS001M	THUMB SCREW M6-1 X 16
71	XST1000071	UPPER SPACING SLEEVE
72	XP6200	BEARING 6200ZZ
73	XPFS02M	FLANGE SCREW M6-1 X 12
74	XST1000074	GUIDE POST
75	XST1000075	BLADE GUIDE SUPPORT
76	XST1000076	BLADE GUIDE 1/2" X 1/2" X 3/8"L
77	XPTS001M	THUMB SCREW M6-1 X 16
78	XST1000078	LOWER BLADE GUARD
79	XPTS003M	THUMB SCREW M6-1 X 12
80	XST1000080	BLADE GUARD (L)
81	XPW03M	FLAT WASHER 6MM
82	XPB04M	HEX BOLT M6-1 X 10
83	XST1000083	LOWER GUIDE SUPPORTOR
85	XPB08M	HEX BOLT M6-1 X 20
86	XPW03M	FLAT WASHER 6MM
87	XST1000087	TABLE
88	XST1000088	TABLE INSERT ALUMINUM
89	XPRP15M	ROLL PIN 3 X 8
90	XST1000090	TABLE PIN
91	XST1000091	TRUNNION
92	XST1000092	SCALE
93	XST1000093	TRUNNION CLAMP SHOE
94	XPB02M	HEX BOLT M6-1 X 12
95	XST1000095	TRUNNION SUPPORT BRACKET
96	XPB26M	HEX BOLT M8-1.25 X 30
98	XST1000098	POINTER
99	XPFS03M	FLANGE SCREW M5-.8 X 6

# Main Breakdown Parts List

REF	PART #	DESCRIPTION
100	XST1000100	KNOB M10-1.5
101	XPB73M	HEX BOLT M10-1.5 X 50
102	XPB82M	HEX BOLT M8-1.25 X 80
103	XPNO3M	HEX NUT M8-1.25
104	XST1000104	MITER GAUGE ASSY
104-1	XST1000104-1	MITER BODY
104-2	XST1000104-2	MITER BAR
104-3	XST1000104-3	POINTER
104-4	XST1000104-4	WASHER PLASTIC
104-5	XPS19M	PHLP HD SCR M5-.8 X 6
104-6	XST1000104-6	PIN
104-7	XST1000104-7	KNOB 1/4" X 3/4"
105	XPSB31M	CAP SCREW M8-1.25 X 25
106	XPLW04M	LOCK WASHER 8MM
107	XPW01M	FLAT WASHER 8MM
108	XST1000108	STEEL BALL 5/16"
109	XST1000109	SPRING
110	XPSS30M	SET SCREW M10-1.5 X 10
111	XPTLW02M	EXT TOOTH WASHER 5MM
112	XST1000112	CORD CLAMP

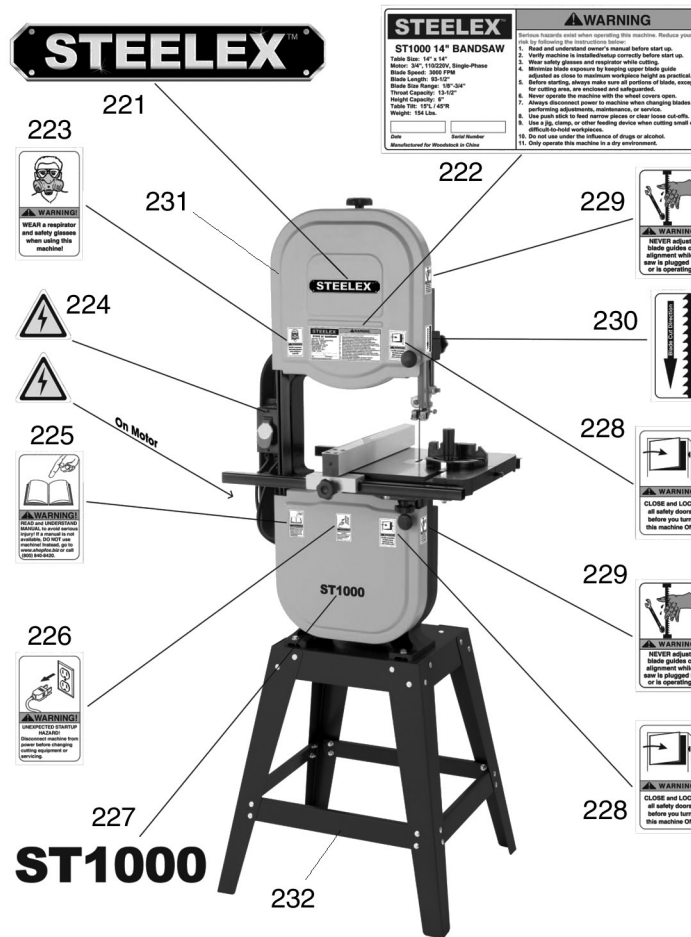
REF	PART #	DESCRIPTION
113	XPS08M	PHLP HD SCR M5-.8 X 12
114	XPB83M	HEX BOLT M6 -1 X 16
115	XST1000115	TENSION POINTER
117	XST1000117	BASE PLATE
118	XST1000118	STRENGTHEN PLATE
119	XST1000119	LEG
120	XST1000120	SHORT BRACE
121	XST1000121	LONG BRACE
122	XPFN01M	FLANGE NUT M8-1.25
123	XPCB06M	CARRIAGE BOLT M8-1.25 X 16
124	XST1000124	BASE
125	XPB80M	HEX BOLT M16-2 X 55
126	XPW08M	FLAT WASHER 16MM
127	XPN13M	HEX NUT M16-2
128	XST1000128	PIN 1/4"
129	XST1000129	LOWER WHEEL SHAFT
130	XP6204	BEARING 6204ZZ
131	XPB23M	KEY 5 X 5 X 25
132	XPW01M	FLAT WASHER 8MM
133	XPS16M	PHLP HD SCR M8-1.25 X 16

# Fence Breakdown & Parts List



REF	PART #	DESCRIPTION
201	XPB04M	HEX BOLT M6-1 X 10
202	XPB08M	HEX BOLT M6-1 X 20
203	XPLW03M	LOCK WASHER 6MM
204	XPW03M	FLAT WASHER 6MM
205	XST1000205	FRONT FENCE RAIL
206	XST1000206	REAR FENCE RAIL
207	XPHTK3M	TAP SCREW M3.5 X 8
208	XST1000208	END CAP
209	XPN01M	HEX NUT M6-1
210	XST1000210	ADJUSTMENT SCREW
211	XPSB83M	CAP SCREW M6-1 X 55
212	XST1000212	INTERNAL SHEATH
213	XST1000213	SUPPORT TUBE
214	XST1000214	BRACKET
215	XST1000215	PAD
216	XST1000216	SQUARE TUBE
217	XPFS06M	FLANGE SCREW M6-1 X 8
218	XST1000218	HAND KNOB M10-1.5
219	XST1000219	POINTER
220	XST1000220	ADJUSTABLE BASE

# Safety Labels Breakdown & Parts List



REF	PART #	DESCRIPTION
221	XST1000221	STEELEX NAMEPLATE
222	XST1000222	MACHINE ID LABEL
223	XST1000223	RESPIRATOR/GLASSES LABEL
224	XST1000224	ELECTRICITY LABEL
225	XST1000225	READ MANUAL LABEL
226	XST1000226	DISCONNECT POWER LABEL
227	XST1000227	ST1000 MODEL NUMBER LABEL
228	XST1000228	KEEP DOORS CLOSED LABEL
229	XST1000229	HAND CUT ADJUSTMENT LABEL
230	XST1000230	BLADE DIRECTION LABEL
231	XST1000231	STEELEX GRAY TOUCH-UP PAINT
232	XST1000232	STEELEX BLACK TOUCH-UP PAINT

## WARNING

Safety labels warn about machine hazards and how to prevent serious personal injury or machine damage. The owner of this machine **MUST** maintain the original location and readability of all labels on this machine. If any label is removed or becomes unreadable, **REPLACE** that label before allowing the machine to enter service again. Contact Woodstock International, Inc. at (360) 734-3482 or [www.shopfoxtools.com](http://www.shopfoxtools.com) to order new labels.



# WARRANTY

Woodstock International, Inc. warrants all **STEELEX**® machinery to be free of defects from workmanship and materials for a period of two years from the date of original purchase by the original owner. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, lack of maintenance, or reimbursement of third party expenses incurred.

Woodstock International, Inc. will repair or replace, at its expense and at its option, the **STEELEX**® machine or machine part which in normal use has proven to be defective, provided that the original owner returns the product prepaid to the **STEELEX**® factory service center or authorized repair facility designated by our Bellingham, WA office, with proof of their purchase of the product within two years, and provides Woodstock International, Inc. reasonable opportunity to verify the alleged defect through inspection. If it is determined there is no defect, or that the defect resulted from causes not within the scope of Woodstock International Inc.'s warranty, then the original owner must bear the cost of storing and returning the product.

This is Woodstock International, Inc.'s sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant that **STEELEX**® machinery complies with the provisions of any law or acts. In no event shall Woodstock International, Inc.'s liability under this warranty exceed the purchase price paid for the product, and any legal actions brought against Woodstock International, Inc. shall be tried in the State of Washington, County of Whatcom. We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages arising from the use of our products.

Every effort has been made to ensure that all **STEELEX**® machinery meets high quality and durability standards. We reserve the right to change specifications at any time because of our commitment to continuously improve the quality of our products.

# Warranty Registration

Name \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone # \_\_\_\_\_ Email \_\_\_\_\_ Invoice # \_\_\_\_\_

Model # \_\_\_\_\_ Serial # \_\_\_\_\_ Dealer Name \_\_\_\_\_ Purchase Date \_\_\_\_\_

The following information is given on a voluntary basis. It will be used for marketing purposes to help us develop better products and services. **Of course, all information is strictly confidential.**

1. How did you learn about us?

\_\_\_\_\_ Advertisement \_\_\_\_\_ Friend \_\_\_\_\_ Local Store  
\_\_\_\_\_ Mail Order Catalog \_\_\_\_\_ Website \_\_\_\_\_ Other:

2. How long have you been a woodworker/metalworker?

\_\_\_\_\_ 0-2 Years \_\_\_\_\_ 2-8 Years \_\_\_\_\_ 8-20 Years \_\_\_\_\_ 20+ Years

3. How many of your machines or tools are **STEELEX**®?

\_\_\_\_\_ 0-2 \_\_\_\_\_ 3-5 \_\_\_\_\_ 6-9 \_\_\_\_\_ 10+

4. Do you think your machine represents a good value?

\_\_\_\_\_ Yes \_\_\_\_\_ No

5. Would you recommend **STEELEX**® products to a friend?

\_\_\_\_\_ Yes \_\_\_\_\_ No

6. What is your age group?

\_\_\_\_\_ 20-29 \_\_\_\_\_ 30-39 \_\_\_\_\_ 40-49  
\_\_\_\_\_ 50-59 \_\_\_\_\_ 60-69 \_\_\_\_\_ 70+

7. What is your annual household income?

\_\_\_\_\_ \$20,000-\$29,000 \_\_\_\_\_ \$30,000-\$39,000 \_\_\_\_\_ \$40,000-\$49,000  
\_\_\_\_\_ \$50,000-\$59,000 \_\_\_\_\_ \$60,000-\$69,000 \_\_\_\_\_ \$70,000+

8. Which of the following magazines do you subscribe to?

_____ Cabinet Maker	_____ Popular Mechanics	_____ Today's Homeowner
_____ Family Handyman	_____ Popular Science	_____ Wood
_____ Hand Loader	_____ Popular Woodworking	_____ Wooden Boat
_____ Handy	_____ Practical Homeowner	_____ Woodshop News
_____ Home Shop Machinist	_____ Precision Shooter	_____ Woodsmith
_____ Journal of Light Cont.	_____ Projects in Metal	_____ Woodwork
_____ Live Steam	_____ RC Modeler	_____ Woodworker West
_____ Model Airplane News	_____ Rifle	_____ Woodworker's Journal
_____ Modeltec	_____ Shop Notes	_____ Other:
_____ Old House Journal	_____ Shotgun News	

9. Comments: \_\_\_\_\_

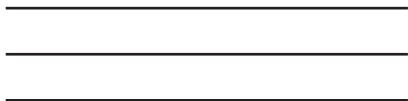
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FOLD ALONG DOTTED LINE



Place  
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**WOODSTOCK INTERNATIONAL INC.**  
**P.O. BOX 2309**  
**BELLINGHAM, WA 98227-2309**



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TAPE ALONG EDGES--PLEASE DO NOT STAPLE



